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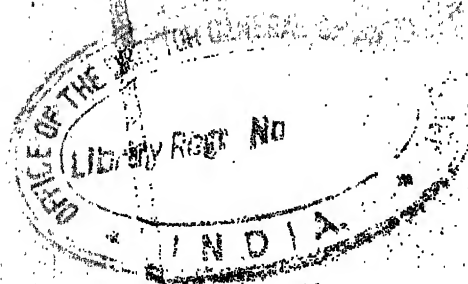
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# Frontispiece

Mount Zara.  
↓

Palace.  
↓

Mount H. Elias.  
↓

↑  
N.W.  
Angle.

↑  
Tomb of  
Aegisthus.

↑  
Tomb of  
Clytem-  
nestra.

← S.W.  
Angle.

↑  
Lion Gate.

↑  
Ramp.

↑  
'Polygonal Tower.'

↑  
Chaos Ravine.

MYCENAE: THE CITADEL FROM THE WEST.



THE ANNUAL  
OF THE  
BRITISH SCHOOL AT ATHENS

No. XXV.

31814

CONTAINING THE REPORT OF  
THE SCHOOL EXCAVATIONS AT MYCENAE, 1921-1923.

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A. B. S. A.

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# TABLE OF CONTENTS.

## EXCAVATIONS AT MYCENAE (*Frontispiece*, Pls. I.-LXII.) :—

		PAGE
A. J. B. WACE.	§ IV.—The Rhyton Well ( <i>continued</i> ) . . .	I
" "	§ V.—The Campaign of 1922 . . .	3
" "	§ VI.—The Campaign of 1923 . . .	5
" "	§ VII.—The Lion Gate and Grave Circle Area (Pls. I., IV.-XXI.)	
A. J. B. WACE.	1. The Lion Gate . . .	9
" "	2. The Granary . . .	38
" "	3. The Ramp . . .	61
" "	4. The Ramp House . . .	74
" "	5. The House of the Warrior Vase . . .	84
" "	6. The South House . . .	86
" "	7. The Grave Circle . . .	103
W. A. HEURTLEY.	8. The Grave Stelai . . .	126

## § VIII.—The Palace (Pls. II., XXII.-XLIII.)

A. J. B. WACE.	1. Introduction . . .	147
" "	2. The Staircase . . .	149
A. J. B. WACE } W. LAMB }	3. The Pithos Area . . .	160
A. J. B. WACE.	4. The Anteroom and the Pillar Basement .	179
" "	5. The Room of the Throne . . .	186
A. J. B. WACE } W. LAMB }	6. The Court . . .	188
A. J. B. WACE.	7. The West Corridor and Staircase . . .	204
" "	8. The South Corridor . . .	206
" "	9. The Western Portal . . .	208
" "	10. The N.W. Propylon and Guardroom . . .	210
" "	11. The Room N. of the Western Portal . . .	217
" "	12. The North Corridor . . .	221

	PAGE
A. J. B. WACE } W. LAMB }	13. The Shrine and Adjoining Chambers . 223
" "	14. The Megaron . . . . . 232
" "	15. The Ante-chamber to Domestic Quarters . 257
A. J. B. WACE.	16. The Red Bath . . . . . 263
" "	17. Summary . . . . . 266
L. B. HOLLAND	18. Architectural Commentary . . . . . 270
	§ IX.—The Tholos Tombs (Pls. XLIV.–LXI.)
A. J. B. WACE.	1. Introduction . . . . . 283
" "	2. The First Group . . . . . 287
" "	3. The Second Group . . . . . 316
" "	4. The Third Group . . . . . 338
" "	5. Summary and Chronology . . . . . 387
L. B. HOLLAND.	6. Architectural Note . . . . . 396
A. J. B. WACE.	7. Appendix. <i>The Curled Leaf Ornament</i> . 397
A. J. B. WACE.	§ X.—The Cyclopean Terrace Building (Pl. LXII.). . . . . 403
C. A. BOETHIUS.	§ XI.—Hellenistic Mycenae.
" "	1. A New Inscription . . . . . 408
" "	2. The Ruins . . . . . 415
" "	3. Its History . . . . . 422
A. J. B. WACE.	§ XII.—Hagios Elias ( <i>Frontispiece</i> and Pl. LXII. 429
Annual Meeting of Subscribers, 1921–1922 . . . . .	436
Income and Expenditure, 1921–1922 . . . . .	444
Donations and Subscriptions, 1921–1922 . . . . .	446
Annual Meeting of Subscribers, 1922–1923 . . . . .	451
Income and Expenditure, 1922–1923 . . . . .	458
Donations and Subscriptions, 1922–1923 . . . . .	460
List of Subscribers . . . . .	465
List of Directors, Honorary Students, Students and Associates . . . . .	470
Rules and Regulations of the British School at Athens . . . . .	483
Notice to Contributors . . . . .	488
Index . . . . .	495

## LIST OF PLATES.

---

*Frontispiece.* Mycenae: The Citadel from the West.

- I. Plan of Lion Gate and Grave Circle Area.
- II. Plan of the Palace after the Excavations of the British School at Athens, 1920-1923.
- III. Hagios Elias: Sketch Plans. 1, Walls on N.E. Shoulder. 2, Small Fort on Summit.
- IV. Lion Gate: Relief of Lions. *a*, from E.; *b*, from W.
- V. Deep Bowls of L.H. III. Style.
- VI. Lion Gate: L.H. III. Vases of Granary Class: *c*, Bath Grave with Nest of Vases as found; *a*, Plain Vase from Nest of Vases; *b*, Jug from ditto.
- VII. Lion Gate: Stone Bowl (restored) from Stratum IV. by W. Wing. Granary: L.H. III. Vases, *a*, *b*, 'Close Style' of Granary Class; *c*, Neck of Anthropomorphic Vase.
- VIII. Granary: L.H. III. Vases from East and West Corridors.
- IX. Granary: L.H. III. Vases of Granary Class from East and West Basements.
- X. Granary: L.H. III. Vases of Granary Class from East Basement.
- XI. Granary: L.H. III. Vases of Granary Class from East Basement.
- XII. Grave Circle Area: Early and Middle Helladic Pottery.
- XIII. Grave Circle Area: Houses to S.: *a*, House of Warrior Vase from E.; *c*, Ramp House; *b*, *d*, South House: *b*, from N.W.; *d*, N. Wall of W. Room.
- XIV. Grave Circle Area: L.H. II. and III. Vase Fragments.
- XV. The Grave Circle: *a*, from N. with Argive Plain in Distance; *b*, from S. with Mt. Kyllene in Distance.
- XVI. Grave Circle: Section through Ring of Slabs.
- XVII. Sections through Grave Circle, Granary and Ramp House.
- XVIII. Sketch Restoration of Grave Circle.
- XIX. Grave Circle: Stele I. from the Fifth Shaft Grave.

- XX. Grave Circle : Stelai IV., V., from the Fifth Shaft Grave.
- XXI. Grave Circle : Stelai VI., VII. *a*, *b*.
- XXII. Palace : Grand Staircase and Pithos Area : *a*, Grand Staircase from W.; *b*, *c*, Pithos Area, *b*, from N., *c*, from S.; *d*, Conglomerate Threshold.
- XXIII. Palace : L.H. I. Pottery from below Floor of East Lobby of Grand Staircase.
- XXIV. Palace : Diagrammatic Section of Pithos Area.
- XXV. Palace : *a*, Stucco Step from Room N. of Western Portal; *b*, Fresco Fragments.
- XXVI. Palace : Fresco Fragments. *a*, Reconstructed Fragments from Pithos Area; *b*, ditto, Chariot from Frieze; *c*, Helmet on Fragment of Megaron Fresco. Athens Museum.
- XXVII. Palace : Reconstruction of Fresco Frieze of Warrior, Grooms and Horses.
- XXVIII. Palace : Fresco Fragments from Tsountas' Excavations.
- XXIX. Palace : Fresco. Reconstruction of Spiral and Lotus Design (B. II.) from Tsountas' Excavations. Nauplia Museum.
- XXX. Palace : Pithos Area. Fragment of M.H. Vase (Matt-painted Group B. III.).
- XXXI. Palace : M.H., L.H. I. and L.H. III. Vase Fragments.
- XXXII. Palace : The Pillar Basement. *a*, Western Part; *b*, N.E. Angle.
- XXXIII. Palace : Painted Stucco Floors. *a*, from Room of Throne; *b*, from Vestibule.
- XXXIV. Palace : The Court. *a*, West Side; *b*, View of Argive Plain to S.; *c*, North Wall; *d*, North Wall (E. end) and Staircase.
- XXXV. Palace : Painted Stucco. *a*, Dado of Porch; *b*, Reconstruction of Floor on N. side of Court.
- XXXVI. Palace : Western Portal, N.W. Angle and Red Bath. *a*, Red Bath from S.; *b*, Column Bases by Propylon from E.; *c*, Western Portal from W.; *d*, Guardroom from W.
- XXXVII. Palace : Stucco Altars. *a*, Leg of Altar I. (*d*) from Shrine; *b*, Altar III. from Tsountas' Excavations; *c*, Fragment of Altar II. from Shrine; *d*, Altar I. from Shrine.
- XXXVIII. Palace : Shrine and Megaron. *a*, Shrine and Chamber of Pithoi; *b*, Crude Brick Wall of Shrine; *c*, Vestibule, Porch and Court; *d*, Megaron from Vestibule.

- XXXIX. Palace: Hearth in Megaron. A, from E.; B, from W.
- XL. Palace: Megaron. Section across Hearth.
- XLI. Palace: Megaron. Patterns painted on successive Layers of Stucco Hearth.
- XLII. Palace: Sketch-reconstruction of Fresco from Megaron.
- XLIII. Palace: Fresco from Megaron.
- XLIV. Tholos Tombs: *a*, Cyclopean Tomb, Dromos and Façade; *b*, Epáno Phournos, Façade.
- XLV. Pottery from Tholos Tombs.
- XLVI. Tomb of Aegisthus: Plan and Sections.
- XLVII. Tomb of Aegisthus: L.H. I. and L.H. II. Pottery.
- XLVIII. Tomb of Aegisthus: M.H., L.H. I. and L.H. II. Pottery.
- XLIX. Tomb of Aegisthus: Fragments of Palace Style Amphorae.
  - L. Tomb of Aegisthus: Reconstruction of Patterns of Palace Style Amphorae.
  - LI. Tomb of Aegisthus: Fragments of Palace Style Amphorae.
  - LII. Lion Tomb: Marble Lamp found by Tsountas in Dromos. Tomb of Aegisthus: Reconstructed Fragment of L.H. II. Bowl.
  - LIII. Lion Tomb: Plan and Sections.
  - LIV. Heraion Tomb: Plan and Sections.
  - LV. Heraion Tomb: *a*, Alabaster Vase; *b*, Steatite Lamp.
  - LVI. Treasury of Atreus: Plan and Sections.
  - LVII. Treasury of Atreus: *a*, Conglomerate Blocks from Inner Chamber; *b*, Plan and Section of Threshold.
  - LVIII. Tomb of Clytemnestra: Plan and Sections.
  - LIX. Tomb of Clytemnestra: Bronze Mirrors with Ivory Handles from Grave-pit in Dromos. From Tsountas' Excavations.
  - LX. Tomb of Genii: Plan and Sections.
  - LXI. Curled Leaf Ornament: 1, Gold, 2, Glass Paste.
  - LXII. Cyclopean Terrace Building: Pithos Burial. 1, L.H. III. Vases found in Pithos; 2, Pithos Burial as found with small Vessel in Mouth.



# LIST OF ILLUSTRATIONS IN THE TEXT.

## EXCAVATIONS AT MYCENAE :—

PAGE

### § VII.—THE LION GATE AND GRAVE CIRCLE AREA

FIG. 1.	The Lion Gate and Bastion from the North. . . . .	9
FIG. 2.	Postern Gate from the East . . . . .	14
FIG. 3.	Lion Gate: West Wing shewing Face of Acropolis Wall between Gate and Granary . . . . .	19
FIG. 4.	Stratification between West Wing of Lion Gate and East Wall of Granary . . . . .	19
FIG. 5.	Inscribed Stirrup Vase (L.H. III.) from Mycenae. Nauplia Museum . . . . .	21
FIG. 6.	Lion Gate: Vase Fragments of L.H. III. Style from Stratum II. by West Wing . . . . .	22
FIG. 7.	Lion Gate: Vase Fragments of L.H. III. Style from Strata by West Wing. I. <i>a, b</i> ; III. <i>c</i> ; IV. <i>d, e</i> ; V. <i>f, g</i> ; X. <i>h</i> . . . . .	25
FIG. 8.	Lion Gate: Granary Class Vases (L.H. III.) from Stratum X. by West Wing . . . . .	32
FIG. 9.	Lion Gate: Granary Class Vases (L.H. III.) from Strata X., XI. by West Wing. <i>a</i> , found in Bath Grave; <i>b</i> , from Nest by Bath Grave; <i>c-f</i> , from Stratum X. . . . .	33
FIG. 10.	Lion Gate: Orientalising Pottery from Stratum XI. by West Wing . . . . .	35
FIG. 11.	Granary: Vase Fragments of L.H. III. Style . . . . .	43
FIG. 12.	Granary: Granary Class Vases, <i>a</i> , from South Corridor; <i>b</i> , from East Basement . . . . .	49
FIG. 13.	Granary: Steatite Pendant from East Basement . . . . .	55
FIG. 14.	Granary: Gold Rosettes and other Finds from Shaft Grave below East Basement . . . . .	57
FIG. 15.	Granary from the South with Lion Gate from within, Entrance to Grave Circle, and Foot of Great Ramp . . . . .	61
FIG. 16.	Hellenistic Chambers at the Top of the Ramp from the South . . . . .	69

# LIST OF ILLUSTRATIONS IN THE TEXT.

	ix
	PAGE
FIG. 17. Ramp House : Middle Helladic Graves . . . . .	77
FIG. 18. Ramp House : Bronze Arrow-head from M.H. Grave . . . . .	78
FIG. 19. Ramp House : L.H. III. Stirrup Vases . . . . .	81
FIG. 20. South House : North Walls of West and Central Rooms, shewing Insertion of Timber Frame and Application of Clay Plaster . . . . .	89
FIG. 21. South House : Middle Helladic Dish from M.H. Grave below East Room . . . . .	94
FIG. 22. Hellenistic Houses over South House . . . . .	97
FIG. 23. Hellenistic Building over South House : Bathroom from S.E. . . . .	99
FIG. 24. Hellenistic Bath from Building over South House . . . . .	100
FIG. 25. Late Helladic II. ( <i>a</i> ), III. ( <i>b</i> , <i>c</i> ) Pottery : <i>a</i> , <i>b</i> , from supporting Wall of Grave Circle; <i>c</i> (restored), from East Room of South House . . . . .	107
FIG. 26. Grave Circle : Early Helladic Vases found by Stamatakes. Nauplia Museum . . . . .	115
FIG. 27. Grave Circle : Early Helladic Pottery found by Stamatakes. Nauplia Museum . . . . .	116
FIG. 28. Grave Circle : Stele II. from Second Shaft Grave . . . . .	129
FIG. 29. Grave Circle : Stele III. . . . .	130
FIG. 30. Grave Circle : Stelai VIII. and IX. . . . .	134
FIG. 31. Grave Circle : Stelai X. and XI. . . . .	136
FIG. 32. Grave Circle : Fragments of Grave Stelai. <i>a</i> , <i>a</i> , shews restored Design of <i>a</i> . . . . .	139

## § VIII.—THE PALACE

FIG. 33. Kylix ( <i>a</i> ) from West Lobby of Grand Staircase; Bowls ( <i>b</i> , <i>d</i> ), Handleless Cup ( <i>c</i> ) from Room N. of Western Portal . . . . .	150
FIG. 34. Grand Staircase, restored. Plans and Section . . . . .	153
FIG. 35. Goblet (L.H. I.) of Yellow Minyan Style (restored) from East Lobby of Grand Staircase . . . . .	158
FIG. 36. Pillar Basement : Fragment of Funnel-shaped Rhyton . . . . .	183
FIG. 37. Palace : Sketch Reconstruction of N.W. Angle of Court . . . . .	191
FIG. 38. Palace : Section through Court along Line A-B . . . . .	196

	PAGE
FIG. 39. Step of painted Stucco from Room N. of Western Portal .	219
FIG. 40. Bronze Knife from Room N. of Western Portal. . .	220
FIG. 41. Obsidian ( <i>a</i> ) and Flint ( <i>b</i> ) Arrow-heads from the Shrine .	224
FIG. 42. Stucco Altar I. (reconstructed) from the Shrine . .	225
FIG. 43. Middle Helladic Pottery (Matt-painted, Group B. II.) from the Shrine . . . . .	227
FIG. 44. Jar of Domestic Ware (M.H.) with Potter's Mark from Shrine . . . . .	229
FIG. 45. Fragments of Clay Roofs of Palace, shewing Impressions of Reeds . . . . .	231
FIG. 46. N.E. Corner of Porch : Ashlar Work in Poros with Remains of painted Stucco Coating . . . . .	234
FIG. 47. Fragments of Decorative Friezes in Stone : <i>a</i> , from Propylon of Palace ; <i>b</i> , from Hellenistic Gymnasium . . . .	236
FIG. 48. Megaron : Hearth and Column Bases from North-west .	244

## § IX.—THE THOLOS TOMBS

FIG. 49. Mycenae: Sketch Plan shewing Relationship of Bronze Age Acropolis and Hellenistic Lower Town with Positions of the nine Tholos Tombs . . . . .	285
FIG. 50. The Cyclopean Tomb : Plan and Sections . . . . .	288
FIG. 51. Cyclopean Tomb : Bronze Knife found by Tsountas . . .	291
FIG. 52. Epáno Phournos : Plan and Sections . . . . .	293
FIG. 53. Epáno Phournos : Early Palace Style Amphora recon- structed . . . . .	295
FIG. 54. Tomb of Aegisthus : Dromos and Façade. . . . .	297
FIG. 55. Tomb of Aegisthus : Doorway from the Dromos, with Modern Pier of Masonry . . . . .	299
FIG. 56. Tomb of Aegisthus : Doorway and Lintel from the Tholos, shewing Absence of Relieving Triangle . . . . .	299
FIG. 57. Tomb of Aegisthus : Seal Impression ( <i>i</i> ), Arrow-heads ( <i>b-d</i> ), and other small Objects . . . . .	303
FIG. 58. Tomb of Aegisthus : Restoration of carved Ivory Relief .	304
FIG. 59. Panagia Tomb : Plan and Sections . . . . .	317
FIG. 60. Panagia Tomb : Dromos and Façade . . . . .	319

# LIST OF ILLUSTRATIONS IN THE TEXT

xi

	PAGE
FIG. 61. Kato Phournos : Plan and Sections . . . . .	321
FIG. 62. Kato Phournos : Dromos and Façade . . . . .	323
FIG. 63. Kato Phournos : Doorway from the Tholos . . . . .	323
FIG. 64. The Lion Tomb : Dromos and Façade . . . . .	327
FIG. 65. The Lion Tomb : Doorway from the Tholos . . . . .	327
FIG. 66. The Heraion Tomb : Façade before Poros Blocks were plundered from left Jamb . . . . .	331
FIG. 67. The Heraion Tomb : Dromos and Façade in 1923 . . . . .	331
FIG. 68. The Heraion Tomb : Gold-work, etc., found by Stamatakes	335
FIG. 69. Treasury of Atreus : Dromos and Façade with Remains of Wall closing Entrance to Dromos . . . . .	339
FIG. 70. Treasury of Atreus : Sections below Floor between the big Blocks of Dromos Wall. L.H. III. Terracotta Figurine . . . . .	341
FIG. 71. Treasury of Atreus : S. Side of Doorway from Tholos, shewing Threshold and Holes for Nails of Door-frame . . . . .	343
FIG. 72. Treasury of Atreus : N. Jamb of Façade shewing Column Base and sawn Fasciae . . . . .	343
FIG. 73. Treasury of Atreus : Threshold shewing Wedge Construction and successive Removal of Poros Wedges, <i>a</i> , small, and <i>b</i> , large . . . . .	348
FIG. 74. Treasury of Atreus : Gold-work found by Stamatakes . . . . .	354
FIG. 75. Treasury of Atreus : Small Ornaments found by Stamatakes	355
FIG. 76. Treasury of Atreus : Small Ornaments, Gold Leaf, Pottery, etc., found under Threshold . . . . .	357
FIG. 77. Tomb of Clytemnestra : Façade . . . . .	359
FIG. 78. Tomb of Clytemnestra : Beads, etc., found by Mrs. Schliemann . . . . .	365
FIG. 79. Tomb of Clytemnestra : Gold-work. <i>a</i> , <i>b</i> , <i>d-p</i> , found by Tsountas in Grave-pit in Dromos; <i>c</i> , <i>q</i> , found by British School . . . . .	365
FIG. 80. Tomb of Clytemnestra : Steatite Jar, reconstructed . . . . .	367
FIG. 81. Tomb of Clytemnestra : Beads and other Ornaments found by Tsountas in Grave-pit in Dromos . . . . .	371
FIG. 82. Tomb of Genii : Dromos and Façade . . . . .	375

	PAGE
FIG. 83. Tomb of Genii: the Same, with Wall closing Entrance to Dromos . . . . .	375
FIG. 84. Treasury of Atreus: Façade . . . . .	377
FIG. 85. Tomb of Genii: Façade . . . . .	377
FIG. 86. Tomb of Genii: Plaques of Glass Paste found by Tsountas .	381
FIG. 87. Tomb of Genii: Objects of Bronze and Terracotta found by Tsountas . . . . .	381
FIG. 88. Tomb of Genii: Gold Ornaments, Paste Beads, etc. found by Tsountas . . . . .	381
FIG. 89. Tomb of Genii: Ornaments of Glass Paste found by Tsountas	383
FIG. 90. Curled Leaf of Ivory from Knossos . . . . .	399

#### § X.—THE CYCLOPEAN TERRACE BUILDING

FIG. 91. Cyclopean Terrace Building: Plan and Diagrammatic Section . . . . .	404
FIG. 92. Cyclopean Terrace Building: Stirrup Vase (L.H. III.) from Grave . . . . .	406

#### § XI.—HELLENISTIC MYCENAE

FIG. 93. Hellenistic Inscription . . . . .	409
FIG. 94. Hellenistic Theatre built above the Tomb of Clytemnestra	419
FIG. 95. Hellenistic Theatre: Front Row of Seats in Stone with Steps on W. side of Dromos of Tomb of Clytemnestra .	419

#### § XII.—HAGIOS ELIAS

FIG. 96. Hagios Elias: View of Mycenae and Argive Plain from Summit at Dawn. Arcadian Hills in Background .	430
FIG. 97. Hagios Elias: Mycenaean Wall just below Summit to N.E.	432
FIG. 98. Hagios Elias: Hellenistic Wall on Shoulder below Summit to N.E. . . . .	434

## EXCAVATIONS AT MYCENAE.

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### § IV.—THE RHYTON WELL (*Continued*).<sup>1</sup>

To the account of this well and of the objects found in it the following additions should be made.

#### *Funnel-shaped Rhyton.*

A. There is one fragment of a funnel-shaped rhyton in stone from Mycenae in the National Museum at Athens. It is fluted and well-polished, and was found by Tsountas in his excavations on the acropolis (Athens Nat. Mus., No. 2669, height .07, width .065, thickness .02 m.). A fragment of another was found in the Palace in 1923, see below, p. 183.

#### *Foot of Alabaster Cup.*

B. Another complete specimen of a cup of this type in the National Museum at Athens (No. 3964) is reported to have been found in Thera. Among the prehistoric pottery found in Thera<sup>2</sup> under the lava, which seems to belong to Middle Cycladic III. and Late Cycladic I., there is a cup of clay so similar in shape that one can only assume it to have been intended as an imitation of such alabaster cups.

#### *Miscellaneous Finds.*

One leg of a three-legged mortar in volcanic stone .11 m. high; possibly Mycenaean.

Two small beads of greenish-white glass paste.

Well-polished disc of white stone, .095 in diameter, and .02 m. thick.

<sup>1</sup> From *B.S.A.* xxiv. p. 209.

<sup>2</sup> Renaudin, *B.C.H.*, 1922, p. 127.

*Pottery.*

N. Small stirrup vase of Tell-el-Amarna style,<sup>1</sup> practically complete, .095 m. high.

To the miscellaneous pottery, all L.H. III., should be added :—

Stirrup vases, one fragment.

Jugs of a hydria type, one fragment.

Kylikes, four fragments, two painted and two plain.

Deep bowls, four pieces.

Kraters, one fragment.

Shallow bowls with horizontal ribbon handles, one piece.

Mugs, one fragment.

Light-on-dark ware, L.H. III. type, one piece.

*Terracotta Figurines.*

O. Forepart of an ox, of ordinary late Mycenaean style.

P. Head of a female figurine with a very wide polos, probably part of a figurine of the ordinary late Mycenaean type with outspread crescent arms.

Q, R. Two spindle whorls of clay, one of the ordinary conical and the other of a double conoid type.

None of these objects throw any further light on the well or its history; the most we can say is that it was in use at least up to the end of the Third Late Helladic period.

A. J. B. WACE.

<sup>1</sup> Cf. Fimmen, *Kretisch-Mykenische Kultur*, p. 165, Fig. 163; Petrie, *Tell el Amarna*, Pls. XXVII., XXVIII.

## EXCAVATIONS AT MYCENAE.

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### § V.—THE CAMPAIGN OF 1922.<sup>1</sup>

AFTER we had spent several days in preparations, including the purchase and despatch of timber and other stores, Miss Lamb left Athens for Mycenae on May 11th, and began work the next day with six men. Dr. Boethius arrived on May 12th and the Director on May 13th. The other members of the party, Miss Lorimer, Mr. Heurtley, Mr. Hutchinson and Dr. Smith, arrived on May 16th and 17th. The number of men employed gradually rose to fifty-five, and then towards the end of the excavations was reduced by degrees to thirty, and finally to four when work closed on August 15th. The headquarters were again established in the Metrogenes house, and accommodation was reserved at the 'Fair Helen' Hotel for the women members of the party. Two rooms were rented in the house of Georgoula Kyriakopoulou as store- and work-rooms. Vasileios Giannikos, who had helped the mender during the first two campaigns, and had been trained under a skilled mender for three months during the winter, acted as mender. Georgios Alexopoulos was again foreman and carried out all his duties efficiently and satisfactorily. The Director was in charge throughout, with Dr. Boethius as his assistant; they also undertook the photography. Miss Lamb acted as second-in-command. Mr. P. de Jong, who was detained in Crete by work for Sir Arthur Evans till June 12th, came as architect and draughtsman. Mr. Hutchinson was keeper of the museum, and after his departure Miss Eldridge of the American School, who had

<sup>1</sup> The eight sections here published are the second instalment of the definite account of the School's excavations at Mycenae; see *B.S.A.* xxiv. pp. 185 ff., for the first instalment. The third and final instalment will be published in *Archaeologia*. The plans and drawings used to illustrate Sections VII.—XII. are the work of Mr. P. de Jong, Dr. Leicester Holland, Monsieur E. Gillieron  *fils*, Professor Droop, and Miss Phyllis Emmerson (Mrs. A. W. Gomme).



taken part in the excavations at Kolophon, volunteered to assist, was put in charge of the museum and proved very efficient. Dr. Waldis also came to help for the last three weeks. Dr. C. W. Blegen, Assistant-Director of the American School, owing to the excavations at Kolophon, was unable to come as the Director's colleague in managing the work this season, but he came for a short time at the end of July, and gave most valuable help, especially in the supplementary researches in the Palace.

The Greek Ministry of Public Instruction, which had readily renewed our permit and given us all facilities, was well represented by Mr. Chrestos Alexopoulos.

Thanks to the improved financial condition of the School, the Managing Committee were able to vote a credit for the excavations this year; still, this would have been far from sufficient, but for the generous support of Sir Arthur Evans, Mr. G. Eumorfopoulos, Lord Abercromby, Mr. R. B. Seager, Cambridge University, Oxford University, Mr. and Mrs. Lamb, Miss Wills and many other friends.

The work was principally devoted to the tombs; first to the Kalkani cemetery, where the Director, Miss Lamb, Dr. Boethius, Mr. Heurtley and Miss Lorimer took charge of separate tombs; to researches on the tholos tombs, particularly the Tomb of Aegisthus, for the excavation of which Sir Arthur Evans had made a special donation; to the clearing of the big chamber tomb under the road (Tomb 505), where extra measures had to be taken to overcome the difficulties and avoid possible dangers. Supplementary researches were carried out in the Palace, and experimental work was done on the Hellenistic theatre and gymnasium. About the middle of June an expedition was made to explore the Mycenaean fort on the summit of Mount Hagios Elias, where trial excavations were made and the walls planned.

Our workmen came as before from Mycenae (Charvati), and the neighbouring villages of Priphtani, Phychtia and Chonikas. Many of them having worked for us for the two previous seasons were skilled hands, and though all did well a special word of praise may perhaps be given to those who worked in Tomb 505 under the leadership of Chrestos Alonistainiotes. We again enjoyed the services of Manoles Chatzipetrou of Naxos, a veteran digger, who has worked for many years at Corinth for the American School and at many famous excavations,

such as the Acropolis of Athens and Delphi. His skill was constantly in demand for all delicate work. The village mason and carpenter was employed for some time on repairs to the Tomb of Aegisthus and the Palace.

A. J. B. WACE.

§ VI.—THE CAMPAIGN OF 1923.

In view of the decision to abandon the excavation of Mycenae, special efforts were made to get all museum work done at Nauplia and Athens, and all plans and drawings completed for the contemplated publications. In Athens Mr. P. de Jong was busy with the plans from his return in February till May 12th, when he went to Knossos. Monsieur E. Gillièron  *fils*  was also occupied in Athens from the end of January in preserving, restoring and drawing the frescoes and small objects. The Director was employed in writing the report, which involved several flying visits to Nauplia and Mycenae, and in superintending the work generally till October 8th. In Athens help was given by Miss Lamb, Miss Eldridge and Miss Pybus. In March and June over six weeks were spent at Nauplia in museum work, in sorting, cleaning, mending and studying the pottery and other finds. Two basement rooms of the museum were floored with cement and whitewashed to serve as store-rooms, and additional shelves were erected in the museum itself to display some of the finds. In this work Professor Droop, Mr. and Mrs. A. W. Gomme, Miss Lamb and Mr. Heurtley all took part. On July 31st the Director left for Mycenae, where work was begun on August 1st with thirteen men under Georgios Alexopoulos as foreman. The number was increased to sixteen, and then decreased to six, when work ceased on August 13th. Mr. and Mrs. Gomme arrived on August 3rd, and the whole party lodged at the 'Fair Helen' Hotel.

A little supplementary work was done on the Palace to verify details for Dr. Holland's plan, a drain was dug round the Tomb of Aegisthus to prevent damage by rain in the winter, and the report, so far as it existed in manuscript, was checked over on the spot. Mr. and Mrs. Gomme, whose assistance was invaluable, had to leave on August 13th, and on August 14th the Director went to Nauplia to complete the museum work and superintend the photography. He was joined by Mr. de Jong, and they stayed at Nauplia till August 23rd.

It should be borne in mind in reading the following sections of this report that, besides those mentioned separately, Dr. C. W. Blegen, Assistant-Director of the American School, has throughout co-operated both by work and advice. He took an active share in the excavations, has always been at hand to discuss problems that arose, and has read much of this report in manuscript. Dr. Boethius devoted much time to preparing the latter for the press and to the correction of the proofs: much is owed to his trained judgment and patient observation. Miss Thallon of Vassar College gave valuable help with Sections VII. and IX. We cannot find words to express our gratitude to Professor Tsountas, whose unselfish courtesy alone made our excavations possible. Dr. Staes, the late, and Dr. Kourouniotes, the present Director of the National Museum at Athens, have laid us under great obligations by their generosity in facilitating our work among the treasures in their charge. Many other friends, too numerous to mention, have also helped by criticism and advice. To all of them our heartiest thanks are due.

Though the authors of the various sections of this report have endeavoured to make them as complete as possible, yet the insufficient time allowed in Greece for its preparation was due to circumstances over which they had no control. It is hoped that the reader will be indulgent to the inconsistencies, inaccuracies and similar shortcomings which he will certainly discover. Owing to Mr. de Jong's long absence at Knossos in 1923, various details have perforce been omitted. Finally, the termination of the Director's appointment at the British School in the autumn of 1923 has prevented him from revising the proofs on the spot.

#### REPAIRS.

Reference has frequently been made<sup>1</sup> to repairs to various buildings at Mycenae carried out during our excavations. We give here a summary list of them to avoid any possible misunderstanding in the future.

#### GRAVE CIRCLE AREA (Pl. I).

*Granary.* In the East Basement (15) we strengthened the right-hand jamb of the entrance, rebuilt the upper part of the east wall and put in a rubble lining to support the earth round the edges of the Shaft Grave. The west and

<sup>1</sup> See p. 5 above and *B.S.A.* xxiv., p. 188; cf. also p. 108 (1) below.

east walls of the East Corridor (10) were partly reconstructed. Two horizontal stones were placed across the top of the window in the West Basement (16) to prevent its collapse.

*Hellenistic Chambers.* The north and west walls of the First or Northern Chamber (30) were repaired.

*Ramp House.* A support was built for the broken west end of the north wall of the megaron (40).

*South House.* The south wall of the North Hall (55), the west wall of the West Room (57), the north wall of the Central Room (56) and the east wall of the East Room (58) were partly rebuilt. In all the rooms the walls were strengthened where necessary and cement was applied to the broken edges of the clay plaster in the hopes that it might be thereby preserved.

#### THE PALACE (Pl. II).

*Grand Staircase (63-67).* The balustrade on the south side of the lowest steps of the lower flight was repaired and the west end of the central supporting wall between the lower flight and the Central Lobby (66) was strengthened and buttressed. The north wall was partly rebuilt and the steps were cemented. In the East Lobby (67) the west wall was partly rebuilt, the door in the east wall built up and the north wall buttressed.

*Room of the Throne (52).* Both faces of the north wall were partially reconstructed and also the west and east walls. In the latter some of the fallen poros blocks were set up on the ashlar base of the wall.

*Court (53).* The north wall was repaired and cracks in the poros blocks were cemented. The south end of the west wall was reconstructed. The foundations of the south wall were supported and the broken edges of the stucco floor along the north wall were cemented.

*West Corridor (49).* Two treads of the little staircase (48) directly above the small landing were reconstructed. The north wall was repaired and the western ends of the walls on either side of the closet under the stairs (47) were supported.

*South Corridor (37).* The north wall was reconstructed in several places.

*Room North of the Western Portal (41).* The west wall was rebuilt and the other walls were repaired.

*Porch (55).* The northern column base was replaced, the east wall was cemented and the south-east angle was reconstructed.

*Vestibule (56).* The north wall was repaired and an attempt was made to secure with plaster and cement the burnt remains of the fresco in the north-west corner.

*Megaron (57).* The east end of the north wall was reconstructed.

*Antechamber to Domestic Quarters (33).* The wall between the short staircase (34) and the east end of the South Corridor (35) was rebuilt. The wall between the staircase (31) and the small basement (32) was repaired.

*Red Bath (26).* The remains of the steps and pavement were supported.

## THOLOS TOMBS (Pls. XLVI, LIII, LVI, LX.).

*Tomb of Aegisthus.* The inner jambs of the doorway were cemented and fresh stone inserted where necessary to replace stones cracked to pieces by the pressure. All round the tholos wherever the facing stones of the rubble work had slipped from their places new stones were put in and the weak places were cemented. The broken edges of the gap in the eastern sector were supported with new work in rubble and cement.

*Lion Tomb.* A row of slabs was laid down in the doorway to mark the site of the missing threshold.

*Treasury of Atreus.* When the central poros wedges of the threshold were replaced, they were set with plaster and cement.

*Tomb of Genii.* A rough set of steps was built to facilitate entrance over the wall blocking the approach to the west end of the dromos.

A. J. B. WACE.

## EXCAVATIONS AT MYCENAE.

### § VII.—THE LION GATE AND GRAVE CIRCLE AREA.

(PLATES I, IV—XXI.)

#### I. THE LION GATE.

THE ancient approach to the Lion Gate (Fig. 1) probably began at the north-west angle of the circuit wall, and thence gradually ascended to the

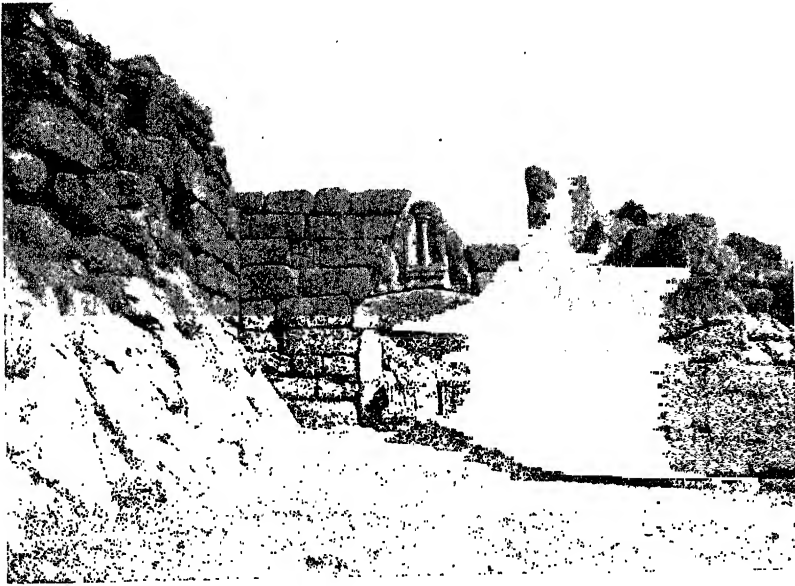


FIG. 1.—THE LION GATE AND BASTION FROM THE NORTH.

gate itself.<sup>1</sup> Thus all possible assailants would have to pass through the fire from the west side of the north-west angle, even before they reached the court-like area directly before the gate. Here they would be faced

<sup>1</sup> See *Frontispiece*.

with a triple fire, from the gate, from the great rectangular bastion (1)<sup>1</sup> which flanks the gate on the west, and from the wall immediately to the east of the gate. Exactly the same defensive plan is provided for the so-called Postern Gate in the northern circuit wall not far from the original north-eastern angle. Some have suggested that the terrace wall (2), which is called a *kyklopische Stützmauer* by Steffen,<sup>2</sup> and juts below the north-west corner of the rectangular bastion, is part of the ancient roadway, which mounted here in zigzags, and then turned abruptly to the right to enter the gate. This view is untenable. The southernmost block of this *kyklopische Stützmauer* is a rectangular block of conglomerate fallen from the bastion, and thus this terrace wall cannot have been built till the bastion was ruined. In 1921, we found the continuation of this wall a little further to the south (3), where it cuts through some Mycenaean walls, which, to judge by the character of all the great quantity of pottery found among them, date from L.H. III. The line of this terrace wall if prolonged southwards would hit the circuit wall and so leave little space for a roadway. Further, it stands to reason that the natural ascent to the Lion Gate always followed the line of the modern carriage way along the crest of the ridge immediately to the north to the Tomb of Clytemnestra. The terrace wall (2, 3) cannot thus be earlier than the classical period and may even be Hellenistic.

The big rectangular bastion (1) seems to have been ruined in the capture of Mycenae either at the end of the Bronze Age or in the fifth century B.C., when the whole of its north-west corner fell away (Fig. 1). Later, probably in the Hellenistic period, an attempt was made to restore it by rounding off the ruined corner. The line of this repair can still be seen quite clearly (see the plan, Pl. I). It is executed in the same polygonal style as the well-known so-called tower in the western circuit wall.<sup>3</sup> There are also two other repairs to the enceinte in the same style, one to the outer face of the Cyclopean wall just to the west of the Grave Circle indicated on the plan just above the letter A of the Section line A-B. The other is at the extreme north-east angle of the enceinte. All these repairs seem to belong to the classical period, but their exact date is a matter of doubt. They may belong either to the early fifth century just

<sup>1</sup> The figures in thick type refer to the Plan, Pl. I.

<sup>2</sup> *Karten von Mykenai*, Pl. II.

<sup>3</sup> Tsountas-Manatt, *Mycenaean Age*, p. 27, Fig. 5.

before the destruction of the city by the Argives, or to its reoccupation in the Hellenistic period in the late third and second centuries B.C. In style they resemble the walls of Asine, and if these, as the results of the researches of the Swedish Expedition <sup>1</sup> show, should be dated not earlier than the third century, then these later repairs to the walls of Mycenae may well be contemporary.

Between the north-east corner of the bastion and the foot of the rock to the east runs a low wall (4) not 80 m. high, which probably served to keep up the roadway. In the south-east corner of the court-like space before the Lion Gate the soft conglomerate rock comes to the surface at the foot of the steep slope of the hard limestone of which the whole of the upper part of the acropolis is composed. The gentler inclination of the soft conglomerate at the foot of the slope of the limestone clearly afforded a line of approach which was both natural and easily defensible. This line of demarcation between the hard limestone and the soft conglomerate can be traced within the gate further south just to the east of the roadway and under the Ramp. As will be seen later,<sup>2</sup> it helps to explain the position of the early cemetery of which the Shaft Graves form part. On the outcropping conglomerate in this south-east angle of the court before the gate we found the rough foundations of some building. The stones include rough limestone and conglomerate, and one piece of soft poros, which is an architectural fragment from some archaic Greek building, since in one side is a lifting socket exactly like those visible in the cornice blocks of the Doric Temple built over the ruins of the Mycenaean Palace on the summit of the acropolis. These foundations must thus be Hellenistic. Near them we found a fragment of late inscription on a piece of marble (13 by 12 m. and 0.45 m. thick) which is broken on the right and above, and is probably from the lower part of a late grave relief. It reads ΕΥΜΕ - - - in letters 0.25 m. high. It can hardly be as early as the Hellenistic period, and is probably of the imperial age. With it we found a pyramidal loom-weight inscribed ΑΕΝΕΟΥ. We sank some pits in the roadway before the gate in the hope that the ancient road level might be discovered. In this we were unsuccessful, as nowhere could we find untouched Mycenaean strata, and all was mixed with fragments of Greek tiles and late potsherds. A pit dug directly in

<sup>1</sup> Persson, *Bull. Soc. Royale des Lettres de Lund*, 1922-1923, p. 41.

<sup>2</sup> See below, p. 118.



front of the threshold of the gate enabled us to dig between the threshold block and the rock on which it rests. In this small crack a few potsherds were found, and none of these are earlier in date than L.H. III.

#### DATE OF THE FORTIFICATIONS.

Similar investigations were made under the Cyclopean wall at two points between the Lion Gate and the so-called Postern Gate, and under the threshold of the latter. In every case L.H. III. sherds were found. It thus seems that the circuit wall of Mycenae should be dated to this same period; in other words, it cannot be older than the beginning of the fourteenth century B.C., since the finds at Tell-el-Amarna give us a fixed point for the date of L.H. III. pottery.<sup>1</sup> This date for the existing fortifications of Mycenae agrees extremely well with the latest results of Dr. Kurt Mueller's investigations of the walls of Tiryns.<sup>2</sup> Here there are three periods. The earliest walls lie below the Palace, and enclosed a very small fortress, the entrance to which is immediately below the outer propylon to the later palace. This first period would be L.H. I. or II. The main walls of the upper citadel and those of the middle citadel belong to the second period, near the beginning of L.H. III. Additions to the upper citadel such as the galleries and the south-eastern tower, the ramp and entrance, the whole of the lower citadel and the west bastion mark a third period which falls well after the beginning of L.H. III., and perhaps at the end of the fifteenth century.

The Lion Gate is so alike in construction and dimensions to the gate at Tiryns which shuts off the palace and upper citadel, that we can only assume that they belong to the same architectural period. Both are constructed of great blocks of conglomerate, mainly hammer-dressed but showing some sawn work, and both are flanked by short walls within. Then the galleries at Tiryns are built on the same principle as the vaulted passage at Mycenae which leads down to the secret cistern and a sally port opposite it in the extreme north-east sector of the enceinte of Mycenae. This particular sector Tsountas<sup>3</sup> proved long ago to be an addition to the original circuit. Here again the parallelism with Tiryns

<sup>1</sup> Fimmen, *Kretisch-Mykenische Kultur*, pp. 164 ff.

<sup>2</sup> He most kindly explained them to us on the spot and has generously allowed us to make use of his unpublished results.

<sup>3</sup> *Jahrbuch*, 1895, pp. 143 ff.

is complete. The evidence we have obtained shews that the walls of Mycenae are not earlier than L.H. III. The German exploration at Tiryns has proved that the main walls of that fortress belong also to L.H. III. The walls of both citadels have always been recognised as alike in style, though those of Tiryns have generally been thought the older.<sup>1</sup> The two citadels correspond well with one another in all respects, and we can date the building of both to the early part of L.H. III.; in other words, not long after the beginning of the fourteenth century B.C.

The rectangular bastion (1), the wall in which the gate stands and the citadel wall from the north-west angle of the enceinte to the south-east corner of the gate court are built of ashlar masonry composed of great blocks of conglomerate (Fig. 1). It seems that the approach to the gate was adorned with this ashlar work purposely to improve its appearance. Similarly the approach to the Postern Gate is faced with ashlar work on its left, and on its right also stands a rectangular bastion of ashlar masonry. By the Lion Gate the ashlar work stops immediately to the west of the great bastion (1). If ashlar work was used to improve the appearance of prominent constructions, then this would make it more probable that the approach to the Lion Gate ran under the western side of the north-west angle of the circuit wall. This ashlar work at the Lion Gate composed of large blocks (many weigh five or six tons or more) of conglomerate, which is a hard and heavy stone, is practically identical with that of the Treasury of Atreus.<sup>2</sup> In fact, so similar in construction and in the dressing of the stone are the two buildings that they seem to be products of the same architectural style, and therefore should be contemporary. In both buildings most of the stone is hammer-dressed, and there are not many traces of the saw.

#### *Method of Construction.*

The Lion Gate itself is built of four great blocks of conglomerate with a lintel, a threshold and two side-posts which are probably mortised together like the blocks of the Postern Gate, where the sockets in the lintel and the tenons in the side-posts can be clearly discerned. The flanges of the lintel and side-posts against which the door rested are the only parts of the work where the saw was used to help dress the stone. The gateway was closed by a double door, probably of wood, swung on pivots, the sockets

<sup>1</sup> Tsountas-Manatt, *Mycenaeen Age*, p. 18.

<sup>2</sup> Cf. Fig. 1, p. 9, and Fig. 69, p. 339.

in another. It is thus possible that the heads of the lions in this relief were carved in some other kind of stone and then attached. Such a stone might well have been steatite in view of the wonderful bull's head rhytons in this material both from Crete and Mycenae.<sup>1</sup> Steatite being a softer material would have enabled the artists to model the features with greater freedom. In technique this relief is very interesting. A careful examination shows that its main lines were cut out with the saw and boring-drill. The straight lines of the capital and of the base and of the lions' legs and bodies were cut out by the saw, whereas the curved lines between the lions' forelegs and round their paws were marked out by lines of drill-holes, which between the forelegs are so close together that they have the appearance of a honeycomb. A similar use of the saw is to be observed in the column bases and capitals of the Treasury of Atreus.

Sir Arthur Evans has shewn the significance of the type of this relief, the Sacred Pillar with the guardian lions, and has given illustrations of parallel types.<sup>2</sup> The column is the sacred pillar of strength and protection, and is an aniconic form of a deity. Such aniconic forms could apparently by the due observance of the rites and by sacrifices be endowed with the power of the deity. In this case, seeing that the guardian animals are lions and so closely associated with the Great Mother whose favourite symbol was the double axe,<sup>3</sup> the sacred pillar possibly stands for the Great Mother Goddess. She seems to have been the divinity later known as Rhea or Kybele. The placing of such a relief over the citadel of Mycenae probably meant that it was placed under the protection of the Great Mother, and that she was the stabilisher of Mycenae.

Stylistically the relief is very good considering the period to which it must be assigned. In spite of the hard material and the primitive and inefficient tools of bronze which would have been all the sculptor had at his service, the bodies of the lions are well rendered. The position is natural and the modelling of the muscles shews a careful observation of nature. This is the earliest piece of monumental sculpture in hard stone on Greek soil, and is in no way an unworthy forerunner of the triumphs that were to come.

<sup>1</sup> Evans, *Tomb of Double Axes*, pp. 79 ff., Figs. 87-90; *B.S.A.* xxiv. Pl. XIII., pp. 202 ff.

<sup>2</sup> Evans, *J.H.S.* 1901, pp. 56 ff.

<sup>3</sup> *Κύβηλις* was a synonym for *Πέλεκυς*, Hesychius, *s.v.*

## THE FLANKING WALLS.

Inside the Lion Gate the road continues in the same direction between two short walls, built in ashlar work of conglomerate and, with one exception, which is sawn, all the blocks are hammer-dressed. The walls are equal in height to the side-posts of the gate, and the top row of blocks have dowel-holes bored in their upper surfaces. These were clearly for the attachment of wooden beams and shew that the gate was roofed on the inside, much as suggested in the restored perspective view in Pl. XVIII. Whether this was merely a roof or served also as a floor for a chamber over the gate cannot now be determined. The gate at Tiryns is similarly flanked on the inside by short walls and probably was also roofed. The roof served to protect the wooden gate from weather, both rain and sun. It is interesting to note that even to-day in Greece it is a very common custom to roof the gates of court or farmyards. This tradition has a long history.

The eastern flanking wall is built against the slope of the limestone rock on that side, and is thus somewhat thicker than the western wall which stands free. In the eastern wall is a small low chamber (5) to accommodate a porter or watchman. A similar chamber exists inside the Postern Gate on the left of one entering, and here again the wall is faced with ashlar work of conglomerate. The poros blocks (6) lying by the south ends of the flanking walls may have been part of a later Greek gateway.

## THE STAIRCASE.

In the angle formed by the western flanking wall of the Lion Gate and the inner face of the circuit wall are the foundations of a small building (8). A low wall (.40-.50 m. high and .50-.55 m. thick) built of rubble masonry packed with the tough yellow clay that served the Mycenaeans as mortar, runs out from the citadel wall parallel to the flanking wall of the gate, and just as far. At its southern end it makes a short return to the east, and between this return and the end of the flanking wall is a narrow entrance paved with slabs. The space thus enclosed is paved at the side with rough slabs but unpaved in the centre, while at the back, against the acropolis wall, is a bench built of larger stones well-packed with the yellow clay (.30-.40 m. high and .30-.60 m. deep). There is a similar bench (.40 m. high and 1.40 m. deep) in the narrow space left between

these foundations and the eastern wall of the Granary. This space, however, seems never to have been roofed. As to the foundations described, they certainly had some purpose, and that probably referred to the gate, since they are parallel to the flanking wall. The most reasonable suggestion is that they supported a staircase, probably of wood (at least in its upper part), which gave access to the roof between the flanking walls, so that the garrison could reach the main circuit wall and the rectangular bastion, and all the outer defences. The lower part of the acropolis wall (Fig. 3) here is of rough Cyclopean blocks of limestone, and was probably intended to be concealed, since the upper part of the wall is of ashlar work of conglomerate.<sup>1</sup> It is always possible that the broader bench between the east wall of the Granary and the Staircase foundation was the bottom step of the Staircase, and that the paved doorway between the southern ends of the foundation and the flanking wall merely gave access to a guardroom or storeroom under the stairs. These foundations rest, like the Granary, on a fill of rough limestone blocks which is held up by the circuit wall. This supposed Staircase is therefore probably not much, if at all, later in date than the walls and the gate themselves, and moreover around them and on the floor of the small chamber fragments of L.H. III. pottery and terracotta figurines were very plentiful. No earlier pottery was discovered here, and as the fill would have been thrown in very soon after the circuit wall was built, this evidence does not contradict the date already arrived at for the walls and fortifications. The surface before excavation was on a level with the top of the flanking wall, and very interesting stratification was revealed by the excavation of this section.<sup>2</sup>

<sup>1</sup> It is at first sight surprising to find two such different methods of construction as the Cyclopean in limestone and the ashlar in conglomerate, existing in one and the same building, and belonging to one and the same period. The appearance of the acropolis wall here, for instance (Fig. 3), might suggest that we have an older and rougher wall crowned at a later epoch by good ashlar masonry. Yet this cannot be so. In the first place, the walls of houses such as the Granary and the South House are built in a style closely similar to the Cyclopean of the acropolis wall, and these are L.H. III. This would make the ashlar masonry of the Lion Gate impossibly late. On the other hand, on the left-hand side of the road towards the Great Ramp, there is a stretch of wall of the Cyclopean style immediately in front of and certainly later than a conglomerate wall of ashlar work (see below, p. 66). There can be no doubt that the two styles were in use at the same time; and that ashlar work was used to obtain a specially imposing effect or specially great strength, as in the Lion Gate and the walls adjoining it, and in the conglomerate tower south-east of the Megaron of the Palace (see below p. 245).

<sup>2</sup> The account of this stratification in *The Antiquaries' Journal*, i. p. 208, is inaccurate.



FIG. 3.—LION GATE: WEST WING SHEWING FACE OF ACROPOLIS WALL BETWEEN GATE AND GRANARY.

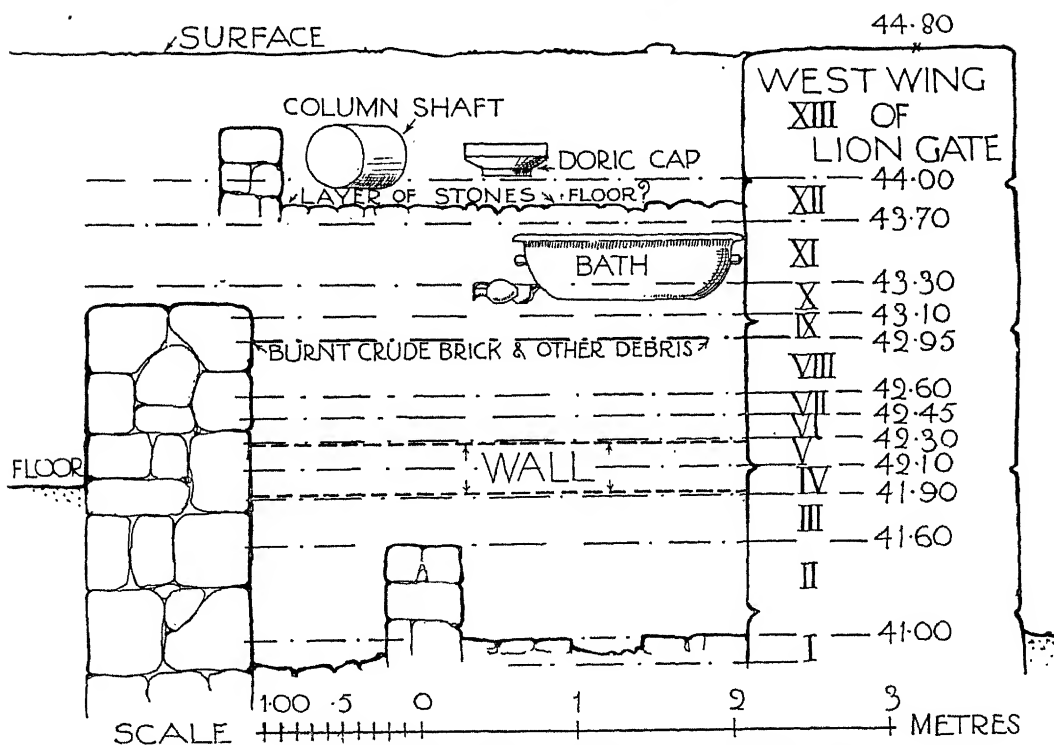


FIG. 4.—STRATIFICATION BETWEEN WEST WING OF LION GATE AND EAST WALL OF GRANARY.

## STRATIFICATION OF DÉBRIS.

The accumulation of débris between the floor level of the supposed Staircase, which is practically the same as the top of the artificial terrace of stone-fill, and the top of the west flanking wall was between 3.80 and 4.00 m. In excavation this was divided into thirteen horizontal layers for the purposes of record (see Fig. 4). The level of the floor of the supposed Staircase and of the top of the fill in the area immediately adjoining it to the west against the Granary wall varies from 40.80 to 41.00 m. above the measured point.<sup>1</sup> This forms the first layer, and the finds<sup>2</sup> from it and the succeeding layers were as follows:—

I. 40.80–41.00 m. Except for one piece of M.H. (local Minyan ware) and one fragment of L.H. I., which are both probably strays, all the pottery found at this level was L.H. III. of good, well-developed style.

*Pottery.*

The shapes represented are:—

Stirrup-vases, seven fragments of small specimens of Tell-el-Amarna style of good fabric, and twelve fragments of large examples of coarse fabric like the inscribed examples from Mycenae<sup>3</sup> (Fig. 5), Tiryns<sup>4</sup> and Thebes.<sup>5</sup>

Jugs of hydria type, common; decoration as a rule confined to a succession of plain bands encircling the body.<sup>6</sup>

Kylikes, common and mostly unpainted. Six pieces were decorated, one with a murex pattern.

Deep bowls (cf. Pl. V.), very common and patterns much varied, but of ordinary style, and include chevrons, plait or ropework belts (Fig. 7, *b*), loose network, vertical groups of lines bordered by wavy lines, groups of vertical wavy lines with concentric half-ellipses attached at the sides, circles surrounded by dots or by wavy lines. Many specimens have borders of small dots on the rim, and one fragment (Fig. 7, *a*) is in the so-called 'close style' (see below p. 41).

<sup>1</sup> As indicated on the plan (Pl. I.), these and all similar levels are reckoned from an arbitrary point approximately 200 m. above sea-level, deduced from Steffen's plan.

<sup>2</sup> In the classification of the pottery we follow throughout that drawn up by Blegen on the results of the stratification at Korakou (Blegen, *Korakou*, pp. 4 ff.). The four classes of Furtwängler and Loeschke, *Mykenische Vasen* can no longer be used, as they were not chronological, were not based on any stratification and have been entirely superseded by Sir Arthur Evans' system.

<sup>3</sup> In the Nauplia Museum from Schliemann's or Tsountas' excavations.

<sup>4</sup> See Rodenwaldt in *Tiryns*, ii. p. 3.

<sup>5</sup> *J.H.S.* 1921, p. 272.

<sup>6</sup> Cf. Blegen, *Korakou*, p. 69, Fig. 100.

Kraters, two stems.

Mugs, two pieces with spiral pattern.

Unpainted and coarse domestic ware, a fair quantity.

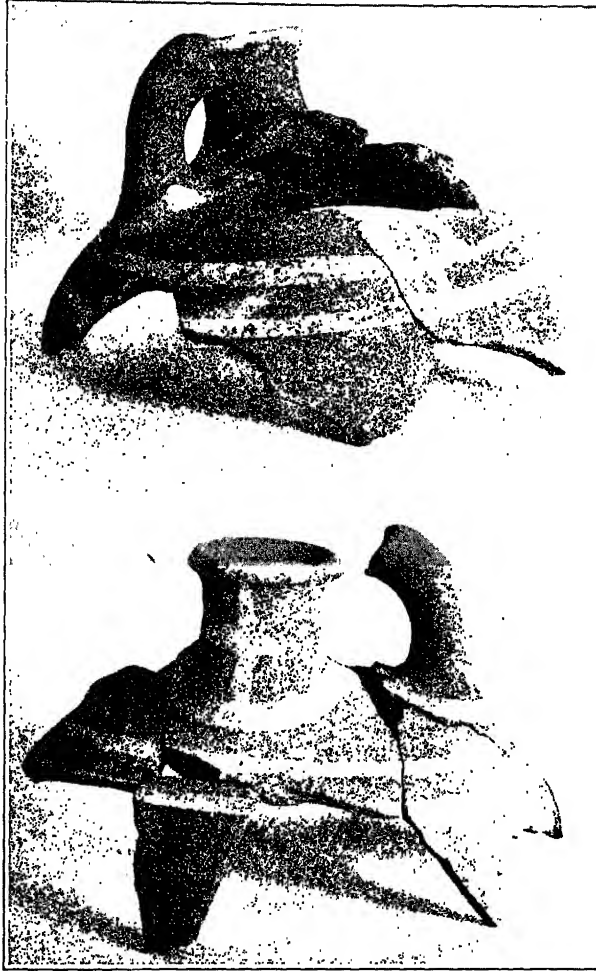


FIG. 5.—INSCRIBED STIRRUP VASE (L.H. III.) FROM MYCENAE (Scale 1 : 3). (Nauplia Museum.)

In general, the fabric of the pottery in this and the immediately succeeding layers is very good. The paint, which varies in tone from red to almost black, is very lustrous and of a thick rich quality. The clay is well-refined, the walls of the vases are thin and well baked. The surface



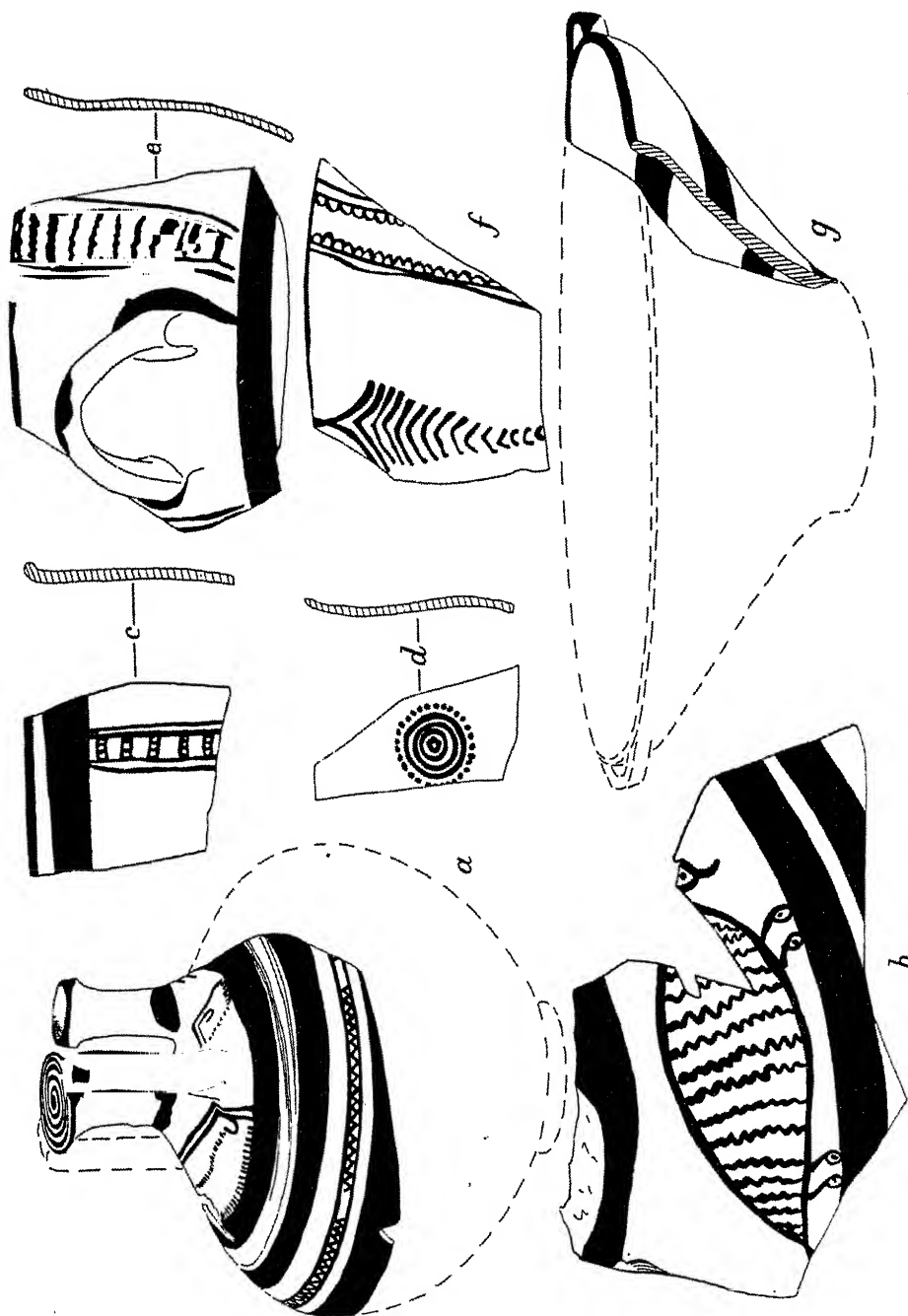


FIG. 6.—LION GATE: VASE FRAGMENTS OF L.H. III. STYLE FROM STRATUM II. BY WEST WING. (Scale 1:2.)

is covered with a slip of smooth even texture and varies in shades from buff with a slight greenish-yellow tint to a pale brick-red. From the technical point of view the pottery is excellent, and though the patterns are conventional and often repeated, yet they are carefully executed.

*Miscellaneous.*

Other finds in this layer comprised two fragmentary terracotta figurines, one the torso of a quadruped and the other the bust of a woman with the arms folded across the chest, and a hollow columnar stem.

II. 41.00-41.60. This layer is that of the so-called Stair-house and contains the objects found within it, which were many, and those found between it and the east wall of the Granary, which were few. In the Stair-house itself and close by its entrance a good deal of lead was found. This was either the remains of leaden receptacles squashed and crumpled, or else of sheet lead which may have been used in the building, and was damaged in its destruction by fire or otherwise. The pottery found here was all of a well-developed L.H. III. character, except for one small piece of Ephyraean ware with part of a rosette.

*Pottery.*

The shapes represented are as follows :—

Stirrup-vases, Tell-el-Amarna style, fairly common; one is in Fig. 6*a*.

Jugs of hydria type, many sherds, though some may belong to three-handled amphorae; decoration of plain bands; but one piece, Fig. 6*b*, shews a curious animal.

Kylikes, common; most unpainted; not more than six painted sherds.

Deep bowls, large and small, very common; typical patterns<sup>1</sup> in

Pl. V. *b*, *d*, *e*, and Fig. 6, *c-f*; only two fragments with murex.

Small cups, five fragments.

Alabastron, one piece.

Shallow spreading bowls,<sup>2</sup> one example, Fig. 6, *g*.

Unpainted domestic ware, common; outstanding shapes shallow spreading bowls with horizontal ribbon handles (Fig. 33 *b*, *d*), and cups.

*Miscellaneous.*

Other finds in this layer include :—

Terracotta figurines: (1) animal, six, one is part of a man driving an ox like the two figurines from Tomb 504; (2) human (female), eleven

<sup>1</sup> Cf. Schliemann, *Mycenae*, Pl. XI., 53.

<sup>2</sup> Cf. Blegen, *Korakou*, p. 63, Figs. 87, 88.

fragments, seven of hollow columnar type with arms folded across chest, and four of solid-stemmed type with outspread crescent arms. Clay discs made by chipping potsherds, ten, varying in diameter from .045 to .06 m., and one similar disc of thin piece of shale .06 m. in diameter. Discs of this type were probably for playing some kind of game.

Conical spindle whorls of steatite, four.

Flat earthenware dish or tray with holes half-pierced through from one side, one fragment.

III. 41.60-41.90. In this layer there was a good deal of decomposed crude brick lying just above the ruined walls of the Stair-house. This should contain the débris which accumulated almost directly after the disuse of the building. A certain amount of lead was found here as well, and quantities of pottery, all except one small piece which is possibly L.H. II., being L.H. III.

#### *Pottery.*

The shapes represented are :—

Stirrup-vases, five or six fragments.

Jugs of a hydria type, common; some pieces may be from three-handled amphorae; patterns principally plain bands; one piece has a net pattern with alternate meshes hatched, another a flower (Fig. 7, c), perhaps an iris, another spirals, and two fragments of this or some kindred shape have small vertical lugs pierced either for suspension or for attaching a lid.

Kylikes, plain, fairly common; painted five pieces, one with murex.

Deep bowls, very common, patterns similar to those in Layer II.

Small cups, one fragment.

Mugs, one piece with stippled or thrush-egg pattern.

Fillers, one piece.

Shallow spreading bowls with horizontal ribbon handles, unpainted, three pieces.

Pyxides, one doubtful piece; red or black glazed ware, five fragments; plain domestic ware of coarse type fairly common.

One small fragment (the shape cannot be identified) with a floral or marine pattern has white lines added to the design, but it is clearly L.H. III.<sup>1</sup>

#### *Miscellaneous.*

Other finds here were :—

Terracotta figurines; animal, one fragment; human (female), two pieces of solid columnar type with crescent arms.

<sup>1</sup> Cf. *B.S.A.* xxiv., p. 207, Pl. XIV. d.

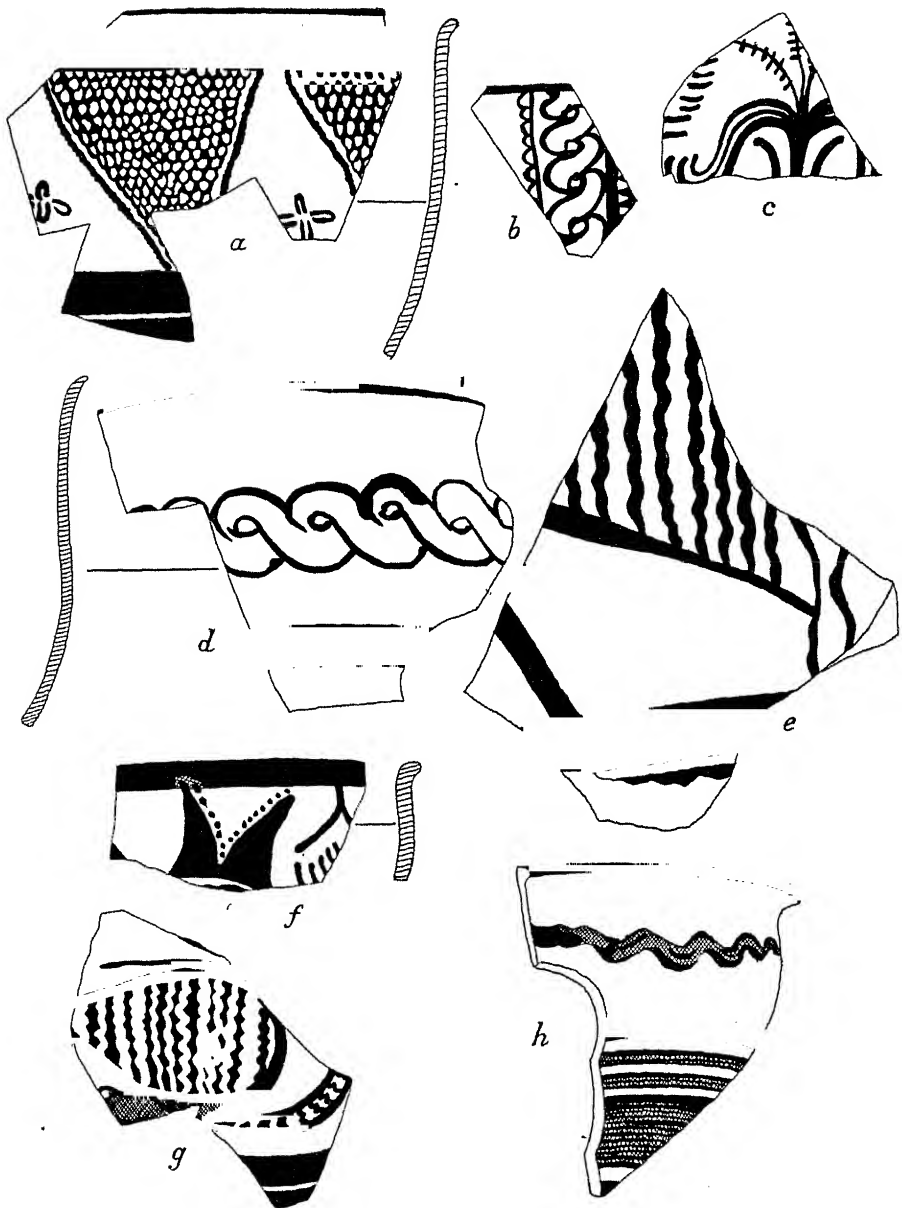


FIG. 7.—LION GATE: VASE FRAGMENTS OF L.H. III. STYLE FROM STRATA BY WEST WING. I. *a, b*; III. *c*; IV. *d, e*; V. *f, g*; X. *h*. (Scale 1:2.)

Glass beads, one of greyish and two small specimens of white glass paste. Spindle whorls, steatite, five of ordinary conical type.

Piece of worked bone, .08 m. long, .015 m. wide; along one edge is a shallow sinking as though to fit on to something else, and there are three holes bored in the bone, but only the central one is pierced right through.

IV. 41.90-42.10. In this the pottery was all L.H. III. except for one stray piece of Yellow Minyan ware. In character it was similar to that of the three preceding layers.

#### *Pottery.*

The shapes represented are :—

Jugs of a hydria type, common, patterns principally plain bands as usual : some pieces may be from three-handled amphorae.

Kylikes, fairly common, mostly plain, a few small painted pieces, three have floral patterns and one a murex.

Deep bowls, common; the patterns similar to those of stratum II.; one with horizontal rope design is in Fig. 7, *d*.

Kraters, one fragment (Fig. 7, *e*) shewing part of a large quadruped (ox?) striped with wavy lines.<sup>1</sup>

Red or black glazed ware, four sherds.

Plain ware, including cups and shallow spreading bowls, fairly common; some coarse domestic ware, two pieces, half-pierced through with small holes sieve-wise.

#### *Miscellaneous.*

Other finds were :—

Stone Bowl, half (Pl. VII. *d*), of black stone flecked with white, carved in relief on the outside with broad-ribbed leaves;<sup>2</sup> height .07 m., diameter .10 m. approximately, thickness .02 m.

Small tubular bead of pink agate.

Two round beads of greenish glass.

Disc of thick white stone, well-polished, .025 m. in diameter and .013 m. thick.

Terracotta figurines, animal, two fragments; human (female), one fragment of crescent arm type.

In this layer and the next there was a rough stone wall not more than .40 m. high and thick, running from the south end of the west wing

<sup>1</sup> Cf. the Vase from Enkomi, *B.M. Cat. Vases*, i. 2, C. 416.

<sup>2</sup> Cf. Maraghiannis, *Ant. Crétoises*, ii. Pl. XIX., 1, 12; Evans, *Prehist. Tombs*, pp. 35, 76, 89, Fig. 100 *e*.

of the Lion Gate across to the east wall of the Granary. The earth by this wall and about on a level with its top was packed hard and contained many pebbles, and so it is possible that there was a floor here at a height of 42 m. or a little more.

V. 42·10-42·30. The top of the wall just mentioned came almost to the top of this layer. All the pottery was L.H. III., and did not differ markedly from that of the preceding layers.

*Pottery.*

The shapes are :—

Stirrup-vases, one piece.

Jugs of hydria type, common; decoration principally plain bands as in earlier layers, but one shews part of a frieze of birds, Fig. 7, g.

Kylikes, fairly common, several painted pieces, one with murex and one with floral design (Fig. 7, f).

Deep bowls, common, patterns as in earlier layers.

Alabastra, one piece.

Spouted vase with basket handle, one fragment.

Thimble-shaped cup, one, very small.

Some plain ware and a little coarse domestic pottery, including part of a pithos rim: one sherd of light-on-dark ware, probably also L.H. III., as it resembles the light-on-dark inscribed stirrup-jars from Mycenae<sup>1</sup> and Tiryns.<sup>2</sup>

*Miscellaneous.*

Other finds are :—

Terracotta figurines, animal, one torso, an ox (?); human (female), two fragments of crescent arm type.

Steatite spindle whorl, one, of usual conical shape.

Boar's tusk, cut and pierced through edges on under-side for sewing on to a leather helmet in the well-known manner,<sup>3</sup> 0·055 m. long and 0·005-0·02 m. wide.

VI. 42·30-42·45. In the character of the pottery of this layer, which was all found above the level of the wall, and the hard layer just mentioned, a slight change can be observed. Though in the main the patterns resemble those of the earlier layers, yet here for the first time occur potsherds which are clearly akin to that typical of strata IX.-XI. The pottery is all L.H. III. except two pieces of M.H. ware (Matt-painted

<sup>1</sup> Fig. 5 above.

<sup>2</sup> Unpublished, in the Nauplia Museum; cf. Rodenwaldt, *Tiryns*, ii. p. 3.

<sup>3</sup> See Tomb 518.

Group B. I.) which are obviously intruders, and part of a cup with stippled or thrush-egg decoration, which may well be L.H. II., but is clearly a stray.

*Pottery.*

The shapes identified are :—

Stirrup-vases, rare.

Jugs of hydria type, common; patterns mostly plain bands, but one has a frieze of pendant netted triangles and several pieces are from a jug which had a serpentine line pattern round it like the vases of the strata IX.—XI. and from the Granary.<sup>1</sup>

Kylikes, fairly common, equal quantities of painted and unpainted examples.

Deep bowls, very common; patterns resemble those of preceding strata, but generally simpler; one has chessboard design.

Mugs, one fragment.

Alabastra, of late type (see Tombs 518 and 529), two pieces, on one paint has a metallic gleam as on very late Mycenaean vases and the earliest Geometric ware from Laconia.<sup>2</sup>

Coarse domestic and plain domestic ware not uncommon.

*Miscellaneous.*

Other finds are :—

Terracotta figurines; animal, three fragments; human (female), three of crescent arm type; also two pieces from chairs or chariots with a net pattern.

VII. 42·45–42·60. The pottery resembles that of the preceding layer, and all was L.H. III. except for one stray piece of M.H. ware (Matt-painted, Group B. I.).

*Pottery.*

The shapes are : —

Stirrup-vases, four pieces.

Jugs of hydria type, fairly common, patterns as in earlier strata.

Kylikes, eleven unpainted sherds and four painted, three have murex patterns.

Deep bowls, common; patterns like those of preceding strata, but generally simpler.

Kraters, two or three possible fragments, but too small for certainty.

Plain and coarse domestic ware, fairly common.

<sup>1</sup> See pp. 30 ff., 36, 50.

<sup>2</sup> Droop, *B.S.A.* xiii., p. 119.

*Miscellaneous.*

Other finds are :—

Terracotta figurines; animal, three fragments; human (female), three of crescent arm type.

Spindle whorl, one, of steatite of usual conical shape.

VIII. 42·60–42·95. In this layer, just below the top of the east wall of the Granary at its present height, there was a good deal of decomposed crude brick and other débris, mostly burnt, which seemed to be derived from the destruction of the upper storeys of that building. If this be so, Strata I.–VIII. should represent the deposit accumulated up to the time of the ruin of Mycenae, and Strata IX.–XI. the period which immediately succeeded the fall of Mycenae. This point is discussed further below.

*Pottery.*

All the pottery in the eighth layer was L.H. III., and of these shapes :—

Stirrup-vases, nine pieces, all of Tell-el-Amarna style.

Jugs of hydria type, common; patterns usually parallel plain bands, but thin serpentine lines occur.

Kylikes, seven plain fragments and three painted which recall the Zygouries style.<sup>1</sup>

Deep bowls, common, patterns as in preceding layers, one piece with murex.

Kraters, three possible pieces.

Shallow spreading bowls with decoration of plain bands within and without like the examples from the East Basement of the Granary,<sup>2</sup> one specimen.

Plain and coarse domestic ware, a little.

*Miscellaneous.*

Other finds :—

Terracotta figurines, human, female, three, one with solid and two with hollow stems: also part of a three-legged chair.

IX. 42·95–43·10. In this layer there was again some decomposed crude brick and other burnt débris presumably from the Granary. It should apparently mark the level existing at the time of the destruction of the building. The change in the pottery is clearer and there are many sherds of the same class as the pottery typical of the next two strata.

<sup>1</sup> See p. 108.

<sup>2</sup> See below, p. 53.



This pottery, to which we have given the name of the Granary Class because much of it was found in the East Basement and in the corridors of the Granary,<sup>1</sup> seems to have been characteristic of Mycenae in the time just before and just after its fall.<sup>2</sup> This is based on the observations (i) that it is the class of L.H. III. pottery characteristic of the Granary at the time of its destruction, which presumably took place simultaneously with the fall of Mycenae, and (ii) that this class of pottery occurs in the section now under discussion in the layers immediately above the burnt débris from the Granary. From this we might conclude that after the fall of Mycenae there was a period of reoccupation which cannot have differed very materially from the immediately preceding age since the same class of L.H. III. pottery characterises both. We know too from Tomb 502, where the latest interment was accompanied by a group of eight vases of this type, that this class of L.H. III. ware can still claim a place, though a late one, in the sequence of L.H. vase fabrics, since it has been found in a Mycenaean family chamber tomb where there was a constant succession of burials. It is further to be remarked that in Tomb 502, not one sherd of Geometric ware was found, thus shewing that this sepulchre was closed before the Iron Age, to which Geometric ware belongs, had really begun. All the pottery in this layer was L.H. III.

#### *Pottery.*

The following shapes were recognised :—

Stirrup-vases, three or four pieces.

Jugs of hydria type, common, many with decoration of plain parallel

<sup>1</sup> See below, pp. 40 ff.

<sup>2</sup> The lateness of the Granary Class is confirmed by the observations of Dawkins and Droop at Phylakopi (*B.S.A.* xvii., pp. 18, 19) where it formed 'a stratum above a thick deposit of pottery of the usual Ialysos style' (cf. *B.S.A.* xvii., Pl. XII. 132 with our Fig. 9 a, and *B.S.A.* xvii., Pl. XIV. 43, 44 with our Pl. V. f). Dawkins and Droop specially note that there were 'many fragments of small vases covered with a thin, bad, and sometimes irregularly streaky black glaze.' The late dating is supported by the evidence of Tombs 502 and 515 in which no Geometric pottery was found, and the Salamis tombs (the evidence for these being cremation graves is not to be trusted) cf. *Ath. Mitt.* 1910, pp. 23, 28, Figs. 1, 6, 7, Pl. VI. 6. The Kalymnos vases in the British Museum (*B.M. Cat. Vases*, i. (1), A.1001–A.1024, Pl. XV.) and some of the later Ialysos vases (*B.M. Cat. Vases*, i. (1), A.821 etc.) should be grouped with the Granary Class and perhaps the vases published by Wide in the *Jahrbuch*, 1900, p. 51, Fig. 107, belong here too, but the Berlin vase quoted by him (*Jahrbuch*, 1886, p. 149, 2938) is of the classical period. Specimens of the Granary Class also occurred among the latest vases in the tholos tomb at the Messenian Pylos, 'Εφ. 'Αρχ. 1914, p. 107, Fig. 12.

bands, one with network design and some shewing the serpentine line pattern of the Granary Class (compare Fig. 12, *b*).

Kylikes, several, about half painted.

Deep bowls, common; patterns mostly as in the preceding strata; at least six pieces come from the later type of this shape belonging to the Granary Class. One piece, perhaps from a krater, shews in a rough sketchy style what is possibly the head of a man driving a chariot.<sup>1</sup>

Charcoal brazier, perforated, one piece.

Black glazed ware, about a dozen pieces, some may be from deep bowls of the Granary Class.

Domestic ware, coarse and plain, fairly common.

*Miscellaneous.*

Other finds are :—

Terracotta figurines, three fragments of animals.

Spindle whorl, one small of terracotta of double conoid shape.

Label, of terracotta, oblong, pierced at one end, .07 m. long and .02 m. wide.

Bone awl or pin, .05 m. long, three small knobs at butt end.

X. 43·10–43·30. Here all the pottery was L.H. III.

*Pottery.*

The shapes are :—

Jugs of hydria type, common; one specimen of Granary Class almost complete (Fig. 8, *c*); large part of another with similar pattern and pendant flowers round the neck, like one of the jugs from the East Basement of the Granary (Pl. X. *f*).

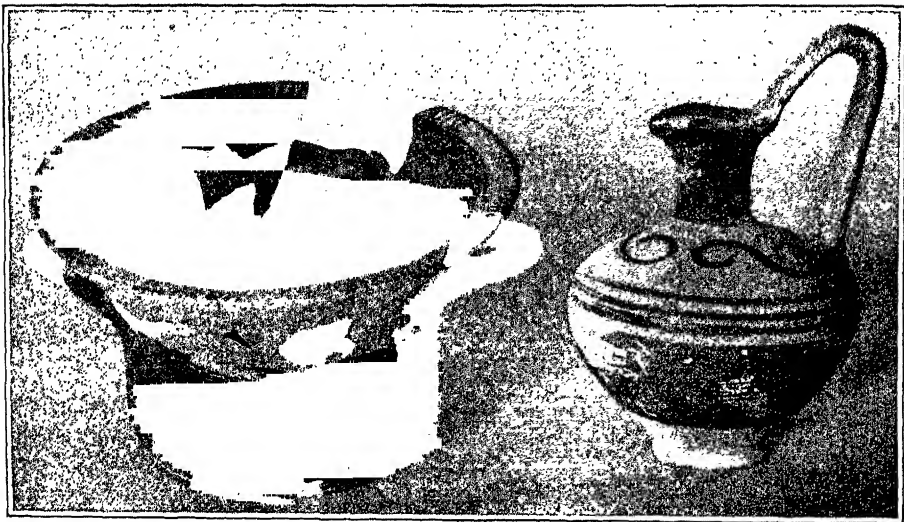
Jugs of oenochoe type, one complete specimen (handle alone restored, .14 m. high) of the Granary Class; as usual base and lower part of body are unpainted, above is belt of solid black and then a zone of three parallel lines (see Fig. 8, *b*), above which again are three horizontal S's.

Kylikes, one plain base, two small painted fragments with murex.

Alabastra, one possible fragment of late style.

Deep bowls; earlier style as found in the lower strata rare; but Granary Class common, several pieces with broad black belts separated by zones of finely-drawn lines in dark brown, like the vases in Pl. VIII. *c*, *d*, from the corridors of the Granary: two whole specimens, one (Fig. 9, *e*, .09 m. high) covered all over both in and out except for lower part of body and base with black glaze paint that has a curious metallic

<sup>1</sup> Cf. *B.S.A.* xxiv., Pl. XIV. *d*; Schliemann, *Tiryns*, Pls. XIV., XV., XVII. *b*; *B.M. Cat. Vases*, i. (2), C. 338 ff., C. 398.



a

b

FIG. 8.—LION GATE: GRANARY CLASS VASES (L.H. III) FROM STRATUM X. BY WEST WING. (Scale *a*, *b*, 2:9; *c*, 1:4.)

sheen, not unlike that of the earliest Geometric pottery at Sparta;<sup>1</sup> the other (Fig. 9, *f*, .115 m. high) covered all over, except the base,

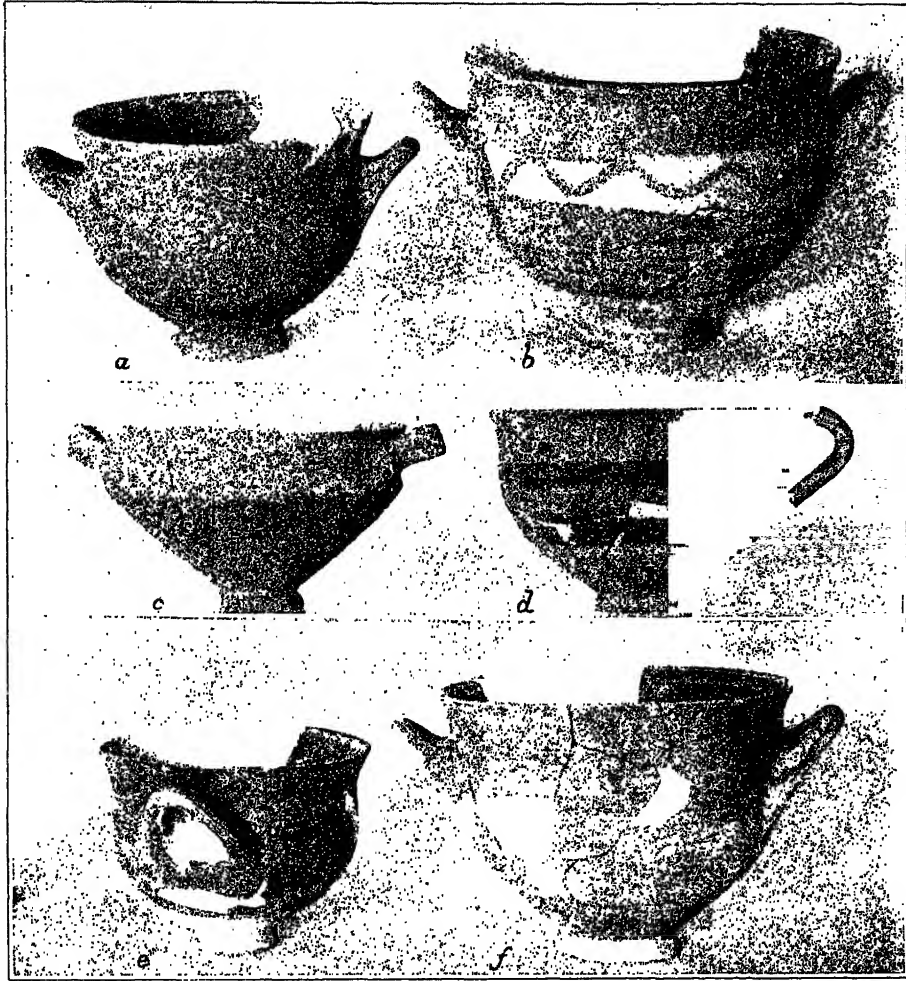


FIG. 9.—LION GATE: VASES OF GRANARY CLASS (L.H. III) FROM STRATA X AND XI BY WEST WING: *a* FOUND IN BATH GRAVE; *b* FROM NEST BY BATH GRAVE; *c-f* FROM STRATUM X. (Scale 1 : 2.)

within and without by wash of thin brown-black paint: clay in both cases well-refined and pale buff in colour.<sup>2</sup>

Cups, one complete decorated with plain bands in red-on-buff clay within and without, height .085 m., Fig. 9, *d*.

<sup>1</sup> Droop, *B.S.A.*, xiii. p. 119.

<sup>2</sup> Cf. Blegen, *Korakou*, p. 71, Fig. 103.

Shallow spreading bowls with horizontal ribbon handles, several fragments and one complete (Fig. 9, *c*, height .08 m.), plain outside, but decorated inside with plain parallel bands.<sup>1</sup>

Bowl with flat base (Fig. 8, *a*, height .105 m.), horizontal loop handles placed half-way up sides; below handles body covered with black glaze paint, but above them unpainted; inside covered with black glaze paint and on lip decorated with groups of parallel lines separated by plain interspaces.

Shallow spreading bowl, incomplete, exact shape unknown (Fig. 7, *h*); covered within by black glaze paint and outside decorated by serpentine line above broad and narrow belts of fine drawn lines.

Coarse domestic ware, fair quantity including one tall, narrow-mouthed jar with two handles between .30 and .40 high, almost complete.

Among the miscellaneous sherds there was one L.H. III. sherd with stippled or thrush-egg decoration.

#### *Miscellaneous.*

Other finds were :—

Iron arrow-head, .08 m. long over all, tang .035 long, head .045 m. long and .025 m. wide; seems to be Hellenic and therefore intrusive: bronze ring .02 m. in diameter.

The complete vases figured from this layer and generally speaking the bulk of the pottery from it belong to that late class of L.H. III. ware now known as the Granary Glass, which is typical also of the next layer. The specimens here illustrated shew how much it differs from the earlier L.H. III. ware and we shall see, when we come to discuss the vases found in the East Basement of the Granary, its close relationship to the so-called 'Close Style,' which may almost be considered one variety of the Granary Class. The shapes, deep bowls, hydriai, stirrup-jars and so on, shew clearly that it belongs to the L.H. III. period. There is one exception; the kylix so common a feature of early L.H. III. deposits, practically disappears by the time the Granary Class begins. This is brought out in a very striking way in the East Basement of the Granary where among so many complete vases there were only two kylikes and these of a degenerate type.<sup>2</sup>

XI. 43.30–43.70. This was the last true Mycenaean stratum and contained, in addition to L.H. III. ware, a few sherds of Orientalising pottery of the Corinthian style and a little Hellenistic ware. No

<sup>1</sup> Cf. Blegen, *op. cit.* p. 63, Figs. 87, 88.

<sup>2</sup> See below, p. 52.

Geometric pottery at all was found in this or indeed in any of the strata of this section. Apart from one possible sherd of L.H. II. there was nothing earlier than L.H. III.

*Pottery.*

Most of the pieces of L.H. III. ware are small and the shapes are not easy to determine, but the following occur:—

Stirrup-vases, three fragments of late Tell-el-Amarna style.

Kylikes, one base, unpainted.

Deep bowls, common; but most of Granary Class; some may be from bowls like Fig. 6, *g*, or Fig. 7, *h*.

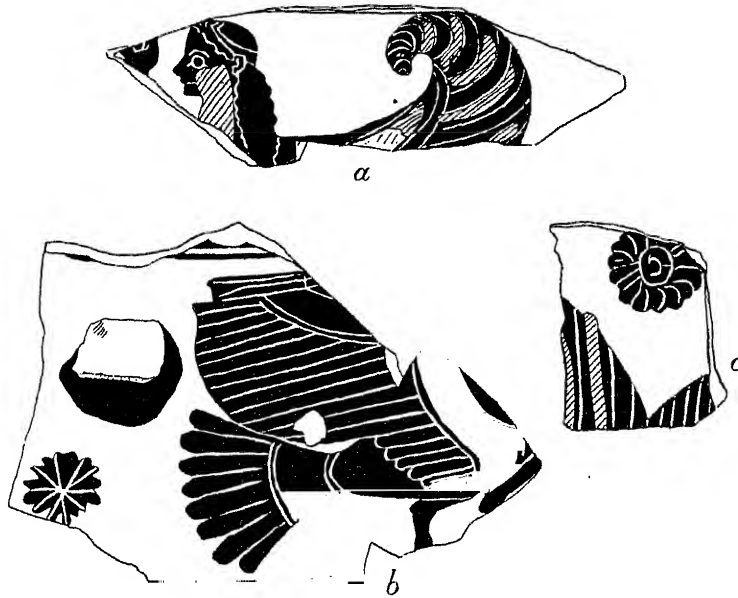


FIG. 10.—LION GATE: ORIENTALISING POTTERY FROM STRATUM XI BY WEST WING. (Scale 2 : 3.)

The Orientalising pottery comprised in all fourteen sherds; three of the better pieces are shewn in Fig. 10; *a* and *b* are of brown clay with drawings of a sphinx and a bird in black with details added in purple or with incised lines; they are of a Corinthian style but might quite well be of local manufacture; *c* is of pale buff clay, and though its general characteristics are similar to the other two it is probably somewhat earlier in date. There are two more small pieces shewing parts of similar

animals, the lid of a trefoil-lipped oenochoe, and eight other ordinary Orientalising sherds.

Hellenistic wares were represented by fifteen sherds of ordinary brown or black glazed ware.

*Miscellaneous.*

Other finds (all L.H. III.) were :—

Terracotta figurines; animal, four fragments, from very small figurines : human (female), two fragments of the crescent arm type but of very rude style.

Spindle whorls, two of black steatite of the usual conical shape.

Bronze, a few scraps.

In this layer a large terracotta bath (Fig. 4, Pl. VI. *c*) was found with one vase inside it, and close by its side a nest of three vases. Since some broken bones were also found by the side of the bath it is possible that it had served as a coffin, and that the interment had subsequently been plundered, when the bones and vases would have been thrown out. Of the four vases (all L. H. III.) three belong to the Granary Class. That found in the bath is a deep bowl (Fig. 9, *a*, height .09 m.), covered within and without, except for the lower part of the body and the base, with dark-brown glaze paint. By the side of the bath lay another deep bowl (Fig. 9, *b*, height .11 m.) painted in and out except the base and the lower body with black glaze, and shewing a serpentine design in a reserved belt on the upper part of the body.<sup>1</sup> By its side lay the fine jug (Pl. VI. *b*, height .30 m.) of pale buff ware, with fine lines on body and neck. Otherwise the only decoration is an S on the handle and a pendant flower on the shoulder in black. The third vase found here was a tall two-handled jar with a narrow neck of coarse domestic ware about .30 m. high (Pl. VI. *a*).

XII. 43.70–44.00. Although in general the pottery of this layer is Hellenistic, earlier styles were represented by a few sherds. There were twelve small fragments of L.H. III. ware, of which five belong to the Granary Class, and two pieces of terracotta figurines of animals. Of Orientalising pottery there are six fragments, of which one is part of a palmette from the neck of a jug or amphora. It is rendered in black and purple and with incised lines in the same manner as the fragments from the preceding layer.

<sup>1</sup> Cf. Schliemann, *Mycenae*, p. 67, Fig. 28.

*Pottery.*

All the rest of the pottery is ordinary Hellenistic ware, which is very common in this stratum. There are pieces of bowls, saucers, jars and cups of glazed ware in red, brown and black. Noticeable are the spout in black glazed ware of a broad-spouted bowl and a broken lamp of the usual late type with a small opening on top and a rough knob on one side. Of decorated ware there are six good pieces; the handle of a jug moulded into the shape of an ivy-leaf and imitating a metal original; one fragment of black glazed ware shewing a pattern of ivy festoons added in pink and a row of white dots; another similar fragment in which the drawing of the design is helped out by the use of incised lines; and lastly three fragments of a pretty saucer of black glazed ware with a very metallic sheen. This was adorned on the inside with a border of ivy-leaves rendered with incised lines and pink and black paint, and within this border festoons of olive-leaves similarly rendered.

*Miscellaneous.*

Other small finds were a small bronze ring .013 m. in diameter, and a small fragment of blue inlay. The former might be of any period, and the latter is probably Mycenaean.

XIII. 44.00-44.80 (Surface). In this layer there were eight small pieces of L.H. III. ware, and one fragment of a Mycenaean terracotta figurine. All the rest is Hellenistic ware which is very common.

*Pottery.*

None of this Hellenistic ware has any painted decoration, but most of it is ordinary red or black glazed ware. The shapes comprise bowls, plates, saucers and jugs. Noticeable pieces are the spouts of two black glazed lamps, three pieces of a strainer, a tear-bottle of buff clay, a moulded rim and two pieces of Megarian bowls.

*Miscellaneous.*

Other finds are :—

Two terracotta loom-weights of the ordinary pyramidal Greek type; one has a T on the base.

A terracotta spool.

A roof-tile inscribed ΕΠΥ . . ., letters .065 m. high, and many fragments of uninscribed late Greek tiles.

A lump of bronze slag and a few scraps of lead.

In this stratum at 44.30 a Doric capital and column shaft were found. The capital is .47 m. square and .17 m. high and is of a late type. The column shaft is .78 m. long, .37 m. in diameter at the top and .40 m. at the bottom.



It has flat flutes in the usual Hellenistic manner. Both it and the capital appear in Fig. 4.

Between 44·30 and 44·80 was a wall about ·40 m. thick and ·50 m. high, running parallel to the west wing of the Lion Gate at a distance of 3 m. It was therefore almost directly above the ruined east wall of the Granary. Between it and the west wing of the Lion Gate lay a rough layer of stones which may indicate a floor level. In any case this wall and floor date from the Hellenistic period, as do also the column shaft and the Doric capital, since they lay above the floor. Probably they are all that was left of some Hellenistic building that stood here. It would have belonged to the third or second century B.C. as far as we can judge from the pottery found. We know too from the epigraphic evidence that this is the time when there was a flourishing *komē* at Mycenae.<sup>1</sup>

## 2. THE GRANARY.

To the west of the Lion Gate lie the ruins of a building of curious plan, which, from the discoveries made within it, has now been christened 'The Granary.' The ruins are on the whole well-preserved, the east wall still stands to a height of 2·30 m., the west is 4·50 m. high, and the south wall of the East Basement (15) is 5·30 m. high from the rock. Schliemann began its excavation in 1876<sup>2</sup> and we completed it in 1920 (Fig. 15).

The building is entered at the southern end of the East Corridor (10) over a threshold, which lies 1·62 m. higher than the threshold of the Lion Gate. This corridor is not straight but has a curious bend towards its southern end (at 10). This peculiarity is shared with the West Corridor (at 11), and the plan shews that the portions of these two corridors to the south of the bend project beyond the rest of the building and appear to have been added some time after the construction of the main part. To this we shall return below.

## THE CORRIDORS.

In clearing away the débris that had accumulated above the East and West Corridors and East Basement (15), we found below the surface down to a level of about 44·30, a Hellenistic stratum corresponding to Stratum XIII. by the Lion Gate.

<sup>1</sup> See pp. 408 ff. below.

<sup>2</sup> *Mycenae*, pp. 99 ff.

*Character of Pottery Finds.*

The bulk of the pottery was Hellenistic, and consisted of black and red glazed ware of the ordinary late Greek shapes, jars, dishes, skyphoi, spouted bowls, lamps, tear-bottles and lids. There were four fragments of Megarian bowls or similar vases and two pieces decorated with a festoon of ivy-leaves rendered with incised lines and pink and white paint on a black glaze ground. Other finds included many loom-weights of the usual pyramidal Greek type, a broken terracotta figurine of late Tanagra style, four clay spools, big and little, a pounder, or rubber, of volcanic stone, the ridge piece from an angular imbrex, a lead rivet, an ear-ring of fine drawn twisted bronze wire (diameter .015 m.) which may be Byzantine, and a spindle whorl of terracotta similar in shape to the Mycenaean example shewn in Fig. 11, *c*; it is decorated with plain parallel bands, and from the character of the paint may well belong to the period of Geometric pottery. There was also a small quantity of miscellaneous pottery; one piece was Yellow Minyan, three pieces L.H. I., and the rest L.H. III. In this L.H. III. ware, which was in poor condition, the following shapes occur:—

Stirrup-vases, one fragment.

Kylikes, two pieces.

Deep bowls, some fragments, with ordinary L.H. III. patterns, murex, ropework, etc., and some of the Granary Class.

There were also five fragmentary terracotta figurines, three being animal and two of women, and one piece of a flat slab of clay half-pierced through with small holes sieve-wise.

Below this again between 44.30 and 43.50 m. there was another thick Hellenistic stratum with quantities of broken pottery and other objects of the period. The pottery consisted, apart from some coarse domestic ware which included the pointed base of an amphora and two pieces of a large pithos, of ordinary Hellenistic black or red glazed ware, among which dishes, small shallow basins, jugs, cups, lids, lamps and tear-bottles were recognised. One piece is decorated with a festoon in pink rendered with pink paint and incised lines on a black glaze ground. There are also several fragments of moulded ware including pieces of Megarian bowls, one of which shews a design of pairs of rampant goats on either side of pendant bunches of grapes (cf. below, p. 101). There are several pieces of a large coarse pot joined with leaden rivets. Other finds comprise many loom-weights of the usual pyramidal type pierced at the peak, a terracotta spindle whorl of a tall conical shape and a conical object of iron (length over all .14 m., length of cone and spike .065 m., diameter of cone .085 m., length of shaft .075 m.). There were also some fragments of iron rods and rings, and five small bronze coins too corroded to be identified, but four appeared to be late Greek and Roman Imperial.

Besides this Hellenistic ware, there was a little pottery of other styles, two pieces of Orientalising ware, one piece of true Geometric ware and one with

concentric circles of a style that might be called proto-Geometric. A little Mycenaean ware occurred, all L.H. III. In this, deep bowls are the commonest shape, and there is one kylix base. The patterns are similar to those from Strata VI.-IX. of the Lion Gate section. One fragment of an animal terracotta figurine was found, and a bone object, .03 m. long and .005 wide with small circles incised on all sides; it is broken at one end where there is a hole pierced through it. It is probably Mycenaean, and perhaps the head of a pin. Another example was found in the East Basement (see below, p. 54), and there is a similar pin or awl head also from Mycenae in the National Museum at Athens, No. 2894.

At this depth, 43.50, the upper part of the débris that had accumulated upon the ruins of the Granary soon after its destruction appeared. Consequently, at the northern ends of the two corridors, between 43.50 and 42.40, there was less Hellenistic ware than in the two upper layers, and naturally much more Mycenaean pottery. The former consists principally of ordinary late black glazed ware in which the usual shapes are found, cups, dishes, jars and lids. There are three pieces ornamented with floral festoons rendered with incised lines and pink or white paint on a black glazed ground. Other finds included a loom-weight of the ordinary pyramidal Hellenic type, and a ring of clay. The Mycenaean pottery was all L.H. III. of the usual character, the patterns resembling those common in Strata VI.-IX. of the Lion Gate section. Deep bowls are the commonest shape; the kylix occurs, but is rare. There was also one piece of Orientalising pottery.

*The Granary Class of L.H. III. Pottery.*

In the same two Corridors between 42.40 and 42 was found the deposit that had collected on their floors during the last period when the building was in use. This consequently is particularly interesting as it shews us the kind of late Mycenaean (L.H. III.) pottery in use at Mycenae at the time of its ruin. The pottery from these two Corridors shews the same characteristics as that from the East Basement and we therefore have one homogeneous class of late L.H. III. ware, of such a strongly marked style that we have called it the Granary Class.<sup>1</sup> Naturally, all the pottery on these floors was L.H. III. Of the painted ware about half resembled that of Strata VI.-IX. in the Lion Gate section, but the fragments were all small and appeared to belong mostly to deep bowls. Otherwise the Granary Class was common, at least half of the painted ware belonging to it. Most of the sherds seemed to be from deep bowls painted within and without with black glaze paint. Fortunately, a good series of specimens of bowls of this class were found here, and the three best are shewn

<sup>1</sup> See above, pp. 29 ff.

in Pls. VII. *a*, VIII. *c*, *d*. Pl. VIII. *c* is a deep bowl .115 m. high and .155 m. in diameter, of fine well-refined clay, with thin walls and well baked. It is glazed inside and out with rich black paint. On both sides of the rim narrow lines are reserved in the buff slip. Similarly, on the lower part of the body outside there are two reserved belts which are decorated with zones of finely-drawn lines in dark brown. Pl. VIII. *d* is similar, and there are two other fragmentary specimens which hardly differ. Yet another slightly smaller (.105 m. high and .135 m. in diameter) is painted in the same manner, but the paint is of very poor quality, and the fabric is generally not so good. Another deep bowl (Pl. VII. *a*, height .12 m., diameter .12 m. approximately), is ornamented in the 'Close Style,' but belongs to the Granary Class. It is covered with black-brown glaze paint inside and out; the upper part of the body is decorated in the 'Close Style'<sup>1</sup> shewing a rosette between wing-like ornaments with netted triangles bordering the field above and below, while the lower part of the body shews the zones of finely-drawn lines which are one of the distinguishing marks of the Granary Class. This vase is very important as indicating that the 'Close Style' and the Granary Class are not only closely akin, but also contemporary. This is confirmed by the evidence from the East Basement,<sup>2</sup> and we thus know the kind of L.H. III. ware in use at Mycenae when it fell. In the East Corridor was found the deep bowl shewn in Pl. VIII. *a* (diameter .31 m., height at least .25 m.). This is of good fabric<sup>3</sup> and is covered with black glaze paint inside. Outside, the rim and the lower part of the body are decorated with simple broad parallel bands of colour, while the upper part shews a degenerate octopus pattern between the handles.

Other pottery found here includes a few pieces of hydria-like jugs decorated with plain bands, and a few pieces of kylikes among the plain pottery ware. There was some coarse domestic ware which comprised tall narrow-mouthed two-handled jars, and the three-legged vase figured here (Pl. VIII. *b*). It is of coarse red-brick clay and .145 m. in height and diameter. Odds and ends comprised two spools of rough clay like those from the East Basement, and part of a triple loop handle from an L.H. III. vase, covered with black glaze paint. On the top is attached the head of

<sup>1</sup> Cf. Blegen, *Korakou*, pp. 61 ff. Fig. 86.

<sup>2</sup> See p. 52 below.

<sup>3</sup> But nothing like so good as the vase in Pl. V. *e* above.

an ox in clay very summarily rendered (Fig. 11, *d*). Modelled ornaments like this are rare in Mycenaean pottery, but one may compare the bull's heads below the handles of the Warrior Vase which is also L.H. III.<sup>1</sup>

Proceeding along the East Corridor right up to the acropolis wall, on which some of the rough clay plaster that coated the walls of the Granary is still visible, one finds a door on the left or west leading into the West Corridor, which is of the same shape as the East, but somewhat narrower. It appears to have one other door exactly opposite the entrance from the East Corridor. Both these doorways seem to have had wooden thresholds and in the walls on either side of the door leading westwards from the western corridor the holes, where the doorposts stood, are visible. Similarly, where the walls of both corridors are sufficiently well preserved, vertical sockets can still be discerned in the clay and rubble masonry. In these stood vertical wooden beams, now long since perished, which set in the masonry base acted as bonding to the superstructure of unbaked brick. This system of bonding walls of crude brick was commonly practised in Minoan and Mycenaean architecture and can be best studied in the South House.<sup>2</sup> The East Corridor seems to have had only a floor of trodden earth and clay, but the West Corridor has a floor of cement.<sup>3</sup> These floors rest on a thick layer of fill, which in its upper part consists mainly of earth and small stones. As one digs down through the fill to the rock the stones increase both in quantity and size. The rock is higher towards the south-east and lower towards the north-west under the walls and foundations of the Granary, and consequently the whole building rests on a fill of big stones thrown in against the inside of the acropolis wall, which here acts as a terrace wall. In the West Corridor a cross wall (12) runs through the fill below the cement floor, but its exact purpose cannot now be determined. It may have been intended to give support to the fill, or it may be a survival of an earlier stage of the building. In both corridors broken pottery was frequent below the floors, and the bulk of it consisted of ordinary L.H. III. ware, thus shewing that the Granary was built during that period. In the East Corridor all the pottery found in the fill below the floor was L.H. III. except one good sherd of L.H. I.

<sup>1</sup> Furtwängler-Loeschcke, *Myk. Vasen*, Pl. XLIII.

<sup>2</sup> See p. 82 below.

<sup>3</sup> Schliemann, according to his notebook, found the continuation of this cement floor in the southern part of the corridor.

None of the L.H. III. pottery was of the Granary Class, but resembled that from the earlier (I.-V.) strata of the Lion Gate section.

*Pottery.*

Among it the following shapes were recognised :—

Stirrup-vases, eight pieces of ordinary Tell-el-Amarna style.

Jugs of a hydria type, two or three sherds.

Kylikes, mostly plain; fairly common.

Deep bowls, common, but no pieces of Granary Class.



FIG. 11.—GRANARY: VASE FRAGMENTS OF L.H. III STYLE. (Scale 1:2.)

Three-handled jars, one specimen of good fabric decorated with red paint on red-buff clay (Fig. 11, *e*, height .075 m., diameter .08 m.).

Small cups, two pieces, with decoration of stripes outside.

Plain domestic ware, one leg from cooking-pot, some pieces of platters and jars.

*Miscellaneous.*

Terracotta figurines, female torso with arms folded across chest, and hollow columnar stem.

In the West Corridor, below the floor almost to the level of the rock, nothing but L.H. III. pottery was found in the fill except five sherds of M.H.

ware (Matt-painted, Group B. I., one, Group B. II., two, and Group B. III., two pieces).

*Pottery.*

In the L.H. III. ware the following shapes occur :—

Jugs of a hydria type, a few sherds, most with simple decoration of plain bands; one piece shews part of floral pattern.

Stirrup-vases, three fragments.

Kylikes, common, mostly unpainted; painted sherds rare.

Deep bowls, common, patterns similar to those of Strata I.—III. of Lion Gate section; no examples of Granary Class.

Kraters, four or five possible fragments.

Plain and coarse domestic ware; some pieces of platters among former; among latter leg of cooking-pot, and lower part of handle with a + sign incised on it. This same symbol occurs on a light-on-dark stirrup-vase of L.H. III. fabric very similar to the Tirynthian inscribed stirrup-vases (Fig. 5).

Fillers, or Rhytons, three pieces, one of tall funnel-shaped type shewing a lily-flower; another is a horn from a bull's head rhyton (Fig. 11, b, .12 m. long), which must have been similar to the examples from Rhodes,<sup>1</sup> Karpathos,<sup>2</sup> Gournia<sup>3</sup> and Knossos.<sup>4</sup>

*Miscellaneous.*

Terracotta figurines, head of woman, probably of crescent arm type.

Directly on the rock below the fill nothing but M.H. pottery was found. This consisted mainly of Matt-painted ware, Group I., or of rather thick buff polished sherds of Minyan shapes. There were also some sherds of coarse fabrics.

THE STAIRCASE.

Passing through the west doorway from the West Corridor, a narrow passage (13) leads between the acropolis wall and the East Basement, and then turns at right angles to the southwards into a short passage (14) between (but above) the two basements. This, like the corridor running along the acropolis wall, rests on a broad pier of solid masonry well packed with yellow clay. Both passages seem to have been floored with beaten earth and white clay. The second of these short passages (14) leads into the south corridor (17) from which the west and east rooms above the basements could be reached. Thence a staircase (18) leads

<sup>1</sup> Karo, *Jahrbuch* 1911, p. 259, Fig. 11.

<sup>2</sup> *J.H.S.* 1887, p. 449, Pl. LXXXIII. (9); *B.M. Vases*, i. (1), A.971, Pl. XV.

<sup>3</sup> Boyd-Hawes, *Gournia*, Pl. XI. 20.

<sup>4</sup> Evans, *Tomb of Double Axes*, p. 88.

down into the lower south corridor from which the East (15) and West Basements (16) are approached (see plans, Pl. I.). The restoration of a staircase here is justified by the following considerations. At the bottom of the restored stairs just before a window in the south wall are the remains of at least two steps built of stones packed with yellow clay. A space like this, with a pier of masonry placed in the centre, serves no reasonable purpose except that of a stairway. The central pier would have been designed to carry the wooden framework of the stairs. The foundations of the pier rest on the fill of big stones, which make up the terrace where the Granary stands, and are not carried down to the rock like the walls of the main rooms. Further, unless there was a stair here, there would be no means of approaching the two basements. The window in the south wall lights the lowest steps of the stair, and also could throw light across the corridor into the open doorway of the East Basement. The West Basement is also lighted by a small window placed high up in the west wall. Here, as elsewhere, where owing to the depth of the rock the walls go down deep, the walls of the basement or ground floor are made much thicker than those of the first floor so as to support the superstructure better.

#### THE WEST BASEMENT.

The West Basement (16) was excavated by Schliemann,<sup>1</sup> who says, 'I excavated in this house and found it filled with ashes both of wood and of animal matter, intermixed with bones, particularly of swine, and with millions of fragments of painted archaic vases. But I found nothing worth mentioning, except a certain quantity of baked wheat and vetches, a weight of jasper with a perforated handle for suspension, some well-preserved archaic vases, the fragment of a vase with sieve-like perforations, and a certain number of whorls of blue stone. One of these vases is particularly interesting for its painted decoration, shewing two swans which hold their heads together, much like the two eagles in the Russian arms.' In his notebook a few other details are given. There were found : '1. Remnants of bones; 2. Mutilated cows; 3. A very curious female idol with a crown on the head, in a sitting posture; it has three irregularly placed breasts, which have evidently been patched there after the idol had been made. . . .' 'A certain number of whorls of green or blue

<sup>1</sup> *Mycenae*, p. 99.



stone, large quantities of broken pottery of all kinds, and particularly of light-green background with ornaments of black colour, representing swans, antelopes, etc. I cannot however give a greater age to these latter, they being intermixed with the usual pottery which shews red, brown or black ornaments on a light-red colour.' The 'mutilated cows' were probably fragments of the usual Mycenaean (L.H. III.) terracotta figurines of animals. The curious female idol may be that figured by Schliemann in his *Mycenae*, Pl. XIX. No. 109. If so, it would appear to be archaic Greek rather than Mycenaean. It is interesting that among the fragments of vases there were so many with animal designs. Probably the vase with the swans which have their heads together like the eagles in the Russian arms is the fine vessel of a hydria type <sup>1</sup> now in the National Museum at Athens,<sup>2</sup> Pl. IX. *b*. This, which is much restored, is decorated in the 'Close Style,' which seems to have been much influenced by fresco painting.

Schliemann seems to have dug through the floor of this West Basement, but it is not certain if he cleared it out to the rock. We found it partly filled with earth, especially towards the north-west angle, where the rock dips down deepest. Here we dug through to the rock, and found that the earth over it, which was nowhere more than 2 m. in depth, had been disturbed. Whether this disturbance was due to Schliemann's excavations or to the fact that this would in any case have been fill thrown in to make up the floor level one cannot now decide. In it we found many potsherds and all are L.H. III.<sup>3</sup>

At the west end of the lower South Corridor (17) the rock rises high, and had been cut away to level the floor which generally consists of a layer of white clay spread above a stratum of earth about .20-.30 m. thick packed on top of the fill of stones. On this floor many small objects and much pottery was found especially towards the east end where there was probably some kind of closet under the stairs. All the pottery except one M.H. sherd of Minyan ware and one fragment of Orientalising pottery, both clearly intrusive, was of the ordinary L.H. III. styles. The finds can be classified thus:—

<sup>1</sup> Furtwängler-Loeschcke, *Myk. Vasen*, Pl. XXXVII., 380.

<sup>2</sup> No. 1126.

<sup>3</sup> Deep bowls and jugs of a hydria type were common; there were half-a-dozen pieces of stirrup-vases, several fragments of kylikes, mostly unpainted, one piece of a mug and four broken terracotta figurines, three of which were of animals, and one part of a crescent arm female figure.

*Pottery.*

Stirrup-vases, seven pieces.

Jugs of hydria type, very common; all of Granary Class, similar to complete specimens from East Basement.

Kylikes, very few; mostly unpainted; painted sherds rare and poor.

Cups, large portions of two specimens about .10 m. high, with only one handle and both of reddish clay. One is covered with red-brown glaze paint inside; the other is plain, but has concentric circles painted on base inside. There is also part of small cup of Vaphio shape (.05 m. high) with plain bands on rim and inside.

Mugs, one piece.

Spouted jug, one piece.

Goblets, one base of buff clay and good fabric, decorated with simple black bands within and without. Another goblet (Fig. 12, *a*; .08 m. high and .13 m. in diameter) is complete but for its base. It has one handle and a very metallic profile, and is covered with black glaze paint both in and out. Both belong to Granary Class and are related to vases from East Basement.

Deep bowls, very common; many pieces of Granary Class, one has three white lines below handles. Pl. V. *f* (height now .13 m., diameter .21 m.) is typical. The paint has become dull through burning and is brown-black. The bowl is completely covered with blackish paint inside; outside decorated with degenerate octopus pattern.<sup>1</sup>

Bowls, shallow, horizontal handles, three pieces of buff or reddish clay decorated with plain bands inside like those from East Basement.

Among miscellaneous L.H. III. sherds four of 'Close Style,' two with added white paint, one with part of a quadruped and one with stippled or thrush-egg pattern. There was a fair amount of coarse domestic ware including two-handled jars and three-legged cooking-pots.

Anthropomorphic vases, one (Pl. VII. *c*), head and neck only of bearded man in dark brown on buff surface, row of dashes in added white below chin; L.H. III.: Mycenaean vases of this type are very rare.

Terracotta figurines, five, one part of bird, one part of ox, and three pieces of women of crescent-arm type.

*Miscellaneous.*

Oblong slab of clay (.10 × .08 × .02 m.) broken at one end and with two holes pierced in it.

<sup>1</sup> This vase is contemporary with the Granary Class; cf. *B.S.A.* xvii., Pl. XIV. 43, 44; Blegen, *Korakou*, p. 61, Fig. 85; *B.M. Cat. Vases*, i. (1), A.1019, A.1020. The resemblance between these vases and one from Tell-es-Safi (Fimmen, *Kretisch-Mykenische Kultur*, p. 196, Fig. 189) suggests that the Granary Class and Philistine pottery are contemporary.

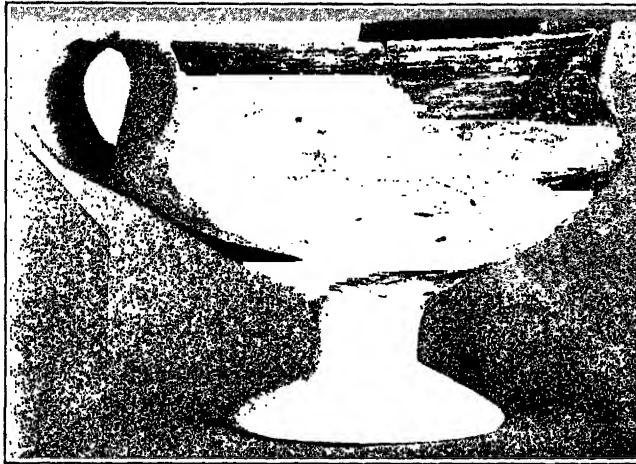
Fragment of a fluted, funnel-shaped rhyton in red stone, much worn (length .075 m., diameter at narrow end .015 m. and thickness .01 m.).  
 Bronze plate, fragment, .06 m. long, .015 m. wide.  
 Olive kernels, carbonised, a few.  
 Bone awl, .08 m. long, butt .01 m. wide and pierced.  
 Stucco, red, small fragment.  
 Small white crystal bead.  
 Small rosette bead of blue paste, pierced from front to back.  
 Small bottle-shaped bead of blue paste pierced longitudinally, .012 m. long.  
 Amygdaloid bead of greenish glass paste, .015 m. long.  
 Steatite whorls, two of ordinary conical type, and two of shanked or button type.

At the east end of this corridor a pit was sunk down below the floor through the fill to the rock. In the fill much L.H. III. pottery was found, and one sherd of L.H. II. (Ephyraean), and one of M.H. (Minyan) ware. Among the L.H. III. ware, jugs of a hydria type, kylikes, mostly unpainted, and deep bowls were common. Most of the latter had patterns like those of the earlier strata in the Lion Gate section, but one or two sherds were of the Granary Class. There was a good deal of ordinary coarse domestic ware of no interest, and four broken terracotta figurines, two of women (one with folded and one with crescent arms), and two of quadrupeds.

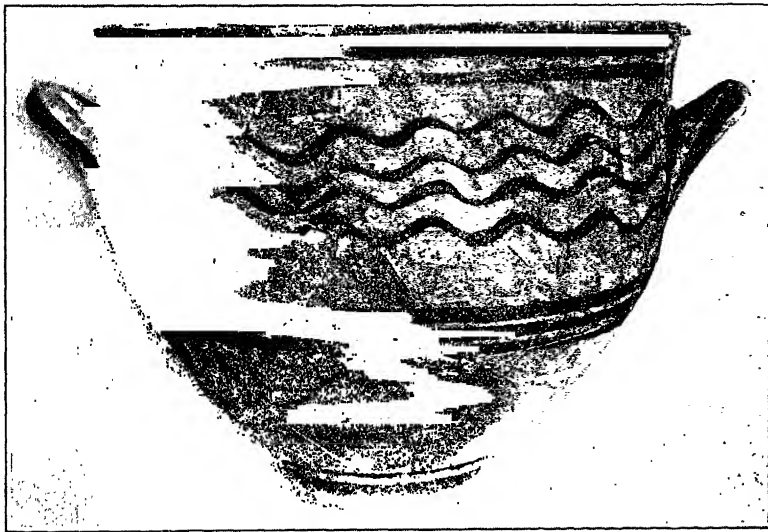
#### THE EAST BASEMENT.

From the lower South Corridor a paved doorway leads into the Eastern Basement (15). In the débris here were clear signs that the whole building had perished by fire. Wood ash was plentiful, and also remains of burnt floors of clay, and there were large masses of burnt and decomposed crude brick and rubble masonry from the upper walls. Further in the refuse from the first floor which had collapsed into the basement, there were remains of store-jars broken by heat. Of these only one or two were the ordinary store-jars (pithoi) of baked earthenware, the rest—and they were many—were vessels in shape like small tubs about .70 m. high and .50 m. in diameter, with thick walls of unbaked clay well mixed with chaff. Vessels of this type of unbaked clay are still in use in the villages of the Argive plain for storing grain and other produce or household goods, and are called *hotselles*. In the remains of these store-vessels

—some were found also in the basement itself—were carbonised grains, such as vetches, barley and wheat.



*a*



*b*

FIG. 12.—GRANARY: GRANARY CLASS VASES, *a* FROM SOUTH CORRIDOR, *b* FROM ABOVE EAST BASEMENT. (Scale *a*, 1:2; *b*, 1:4.)

The walls of this basement, as also of the first floor room directly above it, were plastered with smooth clay. Examination of this enables us to determine the level of the first floor with practical certainty. On

the south wall of the basement the clay plaster is well-preserved up to a height of about 2 m. from the floor. At this level the smooth plaster face gives way to a horizontal belt (.30-.35 m. wide) of rough clay which projects outwards beyond the surface of the plaster. Directly above this the smooth plaster begins again. The height of the upper edge of the rough horizontal belt corresponds well with the levels of the floors of the West Corridor (11) and of the corridor (13) between the East Basement and the acropolis wall (cf. section Pl. XVII.). Thus we come to the conclusion that the rough clay belt marks the broken edge of the floor which collapsed when the wooden beams that supported it gave way in the fire. In the east wall of the basement there is a hole which possibly marks the emplacement of one of the floor beams.

In clearing away the débris above the central part of the Granary we found that the top of the mound of ruins formed by the collapse of this building with two or more floors, lay between 43.45 and 42.80. Here both Hellenistic and Mycenaean (L.H. III.) pottery was found, but the latter was about twice as frequent as the former. The Hellenistic ware was nearly all black glazed and in general very similar to that of the layer immediately above. Two fragments of iron, a thin conical whorl of terracotta and an ordinary pyramidal Greek loom-weight from this level should probably also be classed as Hellenistic. Otherwise, except for one sherd of black polished local Minyan ware, obviously a stray, all was L.H. III., and similar in character to the pottery from Strata IX. and X. of the Lion Gate section. Vases of the Granary Class, especially deep bowls, were common. Of two of these, several fragments were found; one was about .14 m. high, and .19 m. in diameter, and the other about .25 m. high (Fig. 12, *b*). The lower part of the body seems to have been unpainted, while the upper part is decorated with a double, triple or quadruple serpentine line between two broad plain bands.<sup>1</sup> Another small specimen of the Granary Class, though in very poor condition, is similar in the arrangement of its decoration to those from the East and West Corridors (Pl. VIII. *c*, *d*); it is .09 m. high. There was only one fragment of a kylix and only one of a stirrup-vase, and one piece of a pithos. A shallow short stemmed bowl about .07 m. high which seems to have had one handle and was decorated with broad

<sup>1</sup> A vase of this type from Mycenae is in the Nat. Museum, Athens, No. 2752, found in Tsountas' excavations on the acropolis in 1886.

and narrow parallel bands, also belongs to the Granary Class (cf. Fig. 12, *a*). Two whorls of steatite of the ordinary conical type were found here.

Below among the actual débris of the East Basement an enormous quantity of pottery was found. Some had clearly fallen from the upper floor, but many were found lying in fragments on the floor of the basement itself. Nearly all were cracked to pieces by the fire that had destroyed the Granary, and close against the south wall there lay a pile of three-handled cups and other vases caked together in a solid mass with much calcined débris. This pottery is very important as giving us once again a large and compact homogeneous group of vases of the L.H. III. period, which, since they had all been damaged by the fire, must have been in use in the Granary at the time of its destruction and shew clearly the type of pottery in use when Mycenae fell.

#### *Pottery.*

In the following list unless otherwise stated the vases were found on the floor of the East Basement. The following is a brief catalogue :—

Stirrup-vases; there was one fine specimen which had apparently fallen from the first storey. It stands .22 m. high and is decorated in the 'Close Style' of which it is an excellent specimen. There is a frieze of aquatic birds round the centre of the body, and on the top of the handle a very carefully painted spiral with a solid centre. The paint is red, while the slip is yellow-buff in tone (Pl. X. *g*).

Jugs of hydria type; common and four specimens more or less complete, the three best in Pl. X. *d-f*. One (Pl. X. *f*) stands .44 m. high, and in addition to belts of plain colour round lower body and shoulder, has six pendant flowers round middle, three being set between the handles on each side. Another which has lost its handles and most of neck stands .36 m. high (Pl. X. *d*). Its decoration is confined to plain bands on body and shoulder, save for a spectacle pattern on the shoulder and below the upper handle. There is one more similar to this last and another <sup>1</sup> (Pl. X. *e*) shewing a pattern like that (Fig. 8, *c*) from Stratum X. of the Lion Gate section with the addition of a pendant flower at the base of the neck. With these we may also class the two-handled jug (height .37 m.) Pl. IX. *a*, decorated with plain belts round body, shoulder, neck and lip. A broad band descends each handle and ends in a quirk on the body below. All

<sup>1</sup> Height .44 m., handles, neck and part of body restored: dull dark-brown paint on greyish-buff biscuit.

these jugs are of good fabric and painted in red on a red-buff slip. Many other fragments of similar jugs and hydriae.

Kylikes, only two complete specimens (Pl. X. *c*), height .13 m., diameter .11 m.), unpainted and of poor fabric. The shape is remarkable in that the body is shaped more like a funnel than a bowl, the sides being straight, not curved. There is a hole through the stem from top to bottom; this may be a peculiarity of the manufacture or due to a fault in the firing. In the débris there were several stems of unpainted kylikes of the curved type, but though one was of the Zygouries style, painted kylix sherds were rare and small. The scarcity of kylikes in the Granary in comparison with their frequency in the houses at Korakou<sup>1</sup> seems to confirm the conclusion reached from a study of the strata in the Lion Gate section, that the kylix dies out towards the end of L.H. III., and is not one of the shapes of the Granary Class.

Deep bowls; three complete specimens were found among the nest of vases against the south wall of the ground floor, and are illustrated here (Pls. X. *b*, XI. *m*, *n*). They vary in height from .08 to .11 m., and in diameter from .10 to .125 m. and are painted all over inside. The tone of glaze paint used both in and out varies from red-brown to black. They are three typical specimens of the Granary Class, and there were many more fragments of similar bowls. Among the débris there were also many fragments of deep bowls painted with patterns resembling those of the earlier strata of the Lion Gate section, but no whole examples were found, and when we reflect that among the great mass of pottery found in the Granary only two more or less complete examples of patterned deep bowls were found, one (Pl. VIII. *a*) in the East and one in the South Corridor (Pl. V. *f*), it seems clear that in the last days of Mycenae, before the destruction of the Granary, the earlier patterned style was almost dead, and the Granary Class with the 'Close Style' was current.

Cups, two-handled (or rather, small deep bowls); one good example was found, of very good and thin fabric, decorated in the 'Close Style' (Pl. VII. *b*, height .07 m., diameter .09 m.) with a frieze of aquatic birds round the upper part of the body, with finely drawn bands, broad and narrow, below. This like the bowls found in the South House (Fig. 25, *c*) and in the Corridors (Pl. VII. *a*) again shews the strong kinship that exists between the 'Close Style' and the Granary Class.

Shallow spreading bowls with horizontal ribbon handles on edges: four complete specimens and fragments of a few more. The best is shown in Pl. XI. *k*; it is unpainted outside, and inside is decorated

<sup>1</sup> Blegen, *Korakou*, pp. 64 ff., Figs. 94, 95, p. 129.

with simple parallel bands of reddish paint; height  $\cdot 06$  m., diameter  $\cdot 13$  m. Of the other three one is quite plain, one is exactly similar and the other two are very similar to the example illustrated, except that one of them has a spiral on the base inside like the other bowl in Pl. X. *a*.

Shallow spreading bowls with horizontal loop handles: Several fragments and three complete specimens Pls. X. *a*, XI. *h*, *l*. One (Pl. X. *a*, height  $\cdot 065$ , diameter  $\cdot 155$ ) is decorated with simple parallel bands in and out with the addition of a carefully drawn spiral with a solid centre on the base inside. Spirals of this type are common on the centres of the handles of late L.H. III. stirrup-vases<sup>1</sup> (compare Pl. X. *g*), and may be taken as one of the marks of the Granary Class. Of the other two, one (Pl. XI. *l*, height  $\cdot 06$  m., diameter  $\cdot 15$  m.) is unpainted, the other (Pl. XI. *h*, height  $\cdot 06$  m., diameter  $\cdot 115$  m.) has simple parallel bands within and without.

Cups with one handle,<sup>2</sup> five complete specimens, and some fragments. Four of the complete examples are shewn in Pl. XI. *f*, *g*, *i*, *j*; they are either quite plain or decorated with simple parallel bands; one has a row of dots on the rim but is otherwise unpainted. One of the complete specimens was found among the débris of the upper floor. These cups vary in height from  $\cdot 05$  m. to  $\cdot 08$  m., and in diameter from  $\cdot 06$  to  $\cdot 115$  m.

Goblets with three handles, all unpainted, forty-four specimens more or less complete, and many fragments. The majority were found in the nest of vases against the south wall of the ground floor, but some, such as Pl. XI. *d*, come from the débris of the upper storey, having been found near the fine stirrup-vase Pl. X. *g*. Pl. XI. *a-e* gives a good idea of the type which has hitherto been rare in L.H. III. pottery; there is one specimen in the National Museum at Athens from Mycenae, No. 1078. They range in height from  $\cdot 06$  to  $\cdot 14$  m., and in diameter from  $\cdot 07$  to  $\cdot 15$  m. They vary much in fabric, some being well made with thin walls and others such as that shewn in Pl. XI. *d* of heavy, clumsy, thick fabric.

There was a fair amount of coarse domestic ware among which were many fragments of tall two-handled jars with narrow necks, a one-handled cup from the upper floor débris, and a big ladle. This is  $\cdot 085$  m. high,  $\cdot 20$  in diameter, and has a thick heavy handle  $\cdot 16$  m. long, which has a sort of shoe at the end so as to enable the ladle when full to be set down on a flat surface without overturning.

Miscellaneous sherds, which must be regarded as having been among the clay of the floors or, if Hellenistic, as having percolated into the débris from the latter strata above, include:—

<sup>1</sup> Furtwängler-Loeschcke, *Myk. Vasen*, Pl. XXIX. 248; *B.M. Cat. Vases*, i. (1) A. 926 ff.

<sup>2</sup> Cf. Blegen, *Korakou*, p. 65, Fig. 92.



M.H., two polished sherds.

L.H. III. mugs, four fragments; kraters, four possible bases, one of which shews added white paint; rhytons (fillers), one fragment; spouted bowl, like one from Tomb 530, one piece.

Hellenistic, three pieces.

### *Miscellaneous Finds.*

Objects of clay comprise :—

Figurines, six fragments of animals, probably oxen, and three of women. Loom-weights, two, of the ordinary pyramidal Greek type, probably Hellenistic intruders.

Spools, of very coarse badly baked clay, thirty-five, varying in length from .02 to .08 m., and in diameter from .01 to .05 m.

Whorls, one of the conical type and one of the double conoid type.

Spindle whorl (?), one shaped like a wheel with hubs on each side (Fig. 11, c) painted with simple bands and stripes; diameter .07 m., thickness .04 m.

Conical object, .04 m. long, pierced.

Other miscellaneous finds nearly all from the floor of the lower storey were :—

One ring of coiled gold wire similar to those found by Schliemann (*Mycenae*, p. 353, Fig. 529), diameter .025 m., weight 9.5 grammes.

Small bronze ring, .01 m. in diameter, and some small scraps of the same metal.

Small piece of run lead.

Tubular bead of onyx, pierced lengthways, .015 m. long.

Point of a natural hexagonal white crystal.

Broken bead of lapis lazuli, rosette-shaped, .02 m. in diameter, pierced along the axis for threading and with a sinking in the centre of the rosette for the insertion of some inlay.

Steatite pendant in the form of a bull's head (Fig. 13), .02 m. long, .035 m. thick, pierced at the top for threading.

Steatite whorls, eleven of the usual conical type and two of the shanked or button type.

Broken disc of soft stone, diameter .04 m., pierced for suspension.

Bone pin, butt broken off, .065 m. long.

Bone spool, .03 m. long, with knobs at the ends, perhaps a shuttle.

Bone disc, .037 m. in diameter, decorated with concentric circles; there is part of a socket at the back for attachment.

Bone pin head (?), .06 m. long, .01 m. wide and .005 m. thick; broken.

It tapers towards a round shaft at the broken end and may be a pin

head; a similar object was found in the East and West Corridors,<sup>1</sup> and there is one from Tsountas' excavations at Mycenae in the National Museum, Athens, No. 2894. It is ornamented with circles incised, there being two rows on the wide and one row on the narrow face. Foot of faience statuette, .04 m. long and .02 m. high; broken off at ankle and badly burnt, being partly calcined at the break. Seven glass beads, diameter .01 m. with fragments of as many more and one very small glass bead .004 m. Pendant ornament of glass paste of the ordinary Mycenaean curled-leaf type; this shows three curls like the mould figured by Schliemann.<sup>2</sup> It is pierced through the thickness of the lowest curl. This ornament has a long history, since it first appears in a simple form in faience in the transitional period between M.M. III. and L.M. I. at Knossos.



FIG. 13.—GRANARY: STEATITE PENDANT FROM EAST BASEMENT. (Scale 1 : 1.)

It is not found in the Shaft Graves, but in gold and especially in glass paste occurs in L.H. II. and L.H. III. tombs.<sup>3</sup> Disc of glass paste, flat on one side, convex on the other, but decorated on both sides with a raised design of slender waving leaves; diameter 0.2 m., thickness .005 m. Small piece of carbonised canvas: perhaps some of the grain was stored in bags. Carbonised grains of wheat, barley and vetches.

#### THE SHAFT GRAVE.

The floor of this East Basement consisted of a layer of whitish clay laid on the well-trodden fill of earth and stones. At one point towards the centre a sinking attracted our notice, and on examination we found some crude brick laid below the floor. This was removed and further excavation revealed a Shaft Grave constructed exactly like those of the

<sup>1</sup> See above p. 40.

<sup>2</sup> *Mycenae*, p. 107, Fig. 162.

<sup>3</sup> See pp. 397 ff. below.

Grave Circle, but smaller (see section Pl. XVII.). It is about 2.07 m. long and .80-.85 m. wide and lined with dry walls of small stones packed together, 1.20 m. high. The lower part of the grave is cut out in the rock for about .60 to .80 m. at its south end. Directly above its south wall rises the south wall of the East Basement. The contents of the grave had been removed in ancient times, and the grave refilled with rubbish. Afterwards, the crude brick was put in at the north end apparently to prevent any subsidence in the floor. In the earth in the grave, which was hard and packed tight, we found the following objects:

*Gold.*

1. Twenty rosettes of gold leaf of four different sizes, being .07 m. (eight) (Fig. 14, *a*), .05 m. (four) (Fig. 14, *b*), .04 m. (four) (Fig. 14, *c*), and .027 m. (four) (Fig. 14, *d*) in diameter. There are also a few fragments of rosettes of the second size. All are of fairly thick gold leaf, except those of the second size which are thin and fragile. All are pierced round the edges for sewing on to the grave-clothes, or so as to be attached in some other manner. One of the largest size has a portion of the edge clipped off as though by scissors, like several of the gold discs found by Schliemann in the Shaft Graves within the Grave Circle (Athens, Nat. Mus., 6239-6242).

*Miscellaneous.*

2. Five spherical beads of dark-blue glass paste; they have a raised pattern of twisted lines winding round them (Athens, Nat. Mus., 6249); diameter .01 m. (Fig. 14, *e*).

3. Two pieces of horn, sheep or goat, cut into the shape of boar's tusks, with holes pierced through the under side of the edges so that they could be sewn on to leather helmets (Athens, Nat. Mus., 6244); length .085 m. (Fig. 14, *g*, *h*).

4. One bottle-shaped cylindrical bead of dark-blue glass paste (Athens, Nat. Mus., 6249); length .02 m. (Fig. 14, *f*).

5. Two fragments of boar's tusks (Athens, Nat. Mus. 6244).

6. One small piece of bronze (Athens, Nat. Mus.).

7. Two vessels of lead much squashed and crumpled (Nauplia Museum).

8. Steatite whorl, of the ordinary conical shape (Athens, Nat. Mus., 6243).

*Pottery.*

Eleven pieces are L.H. I. and II., and all the rest L.H. III. The shapes recognised are:—

L.H. I.-II. Three pieces come from cups decorated with spirals joined by curving tangents<sup>1</sup> like those from Tombs 517, 518 and 529. One

<sup>1</sup> Cf. Pl. XXIII. *a*.

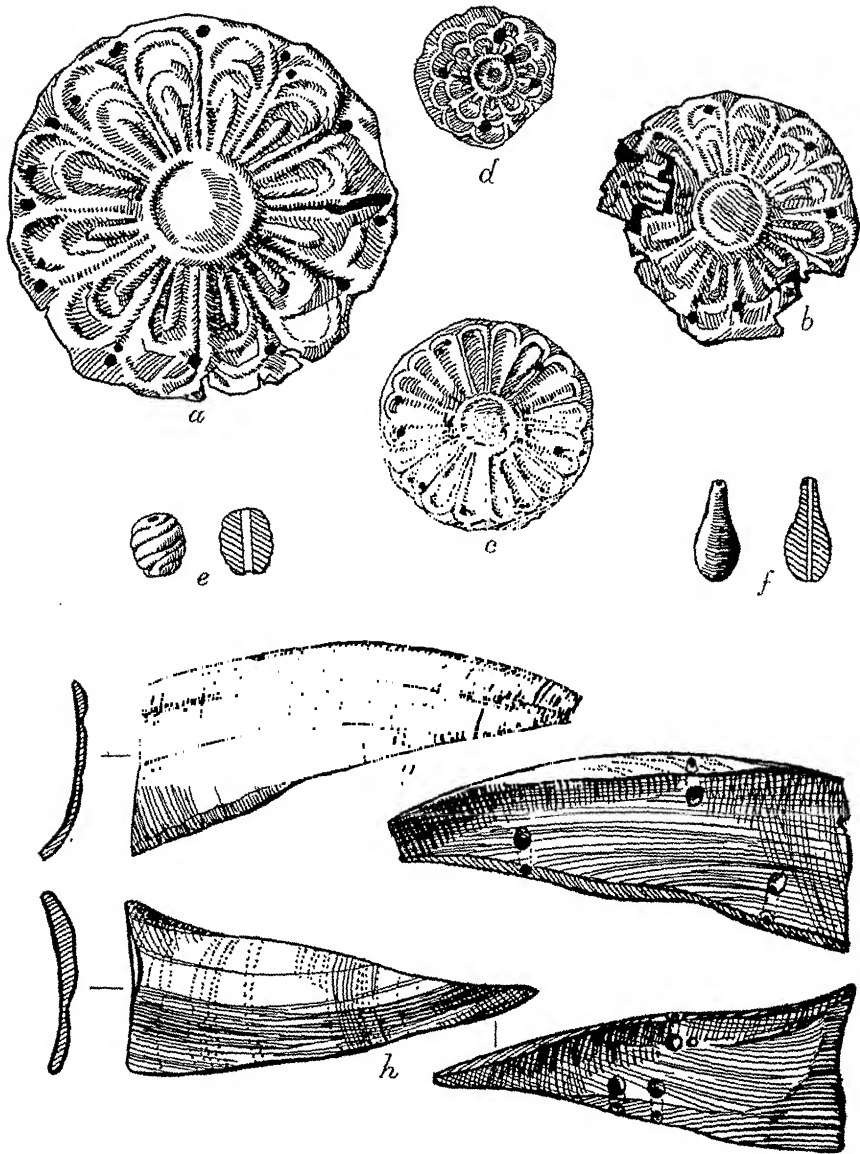


FIG. 14.—GRANARY: GOLD ROSETTES AND OTHER FINDS FROM SHAFT GRAVE BELOW EAST BASEMENT. (Scale 2:3.)

piece is from a straight-sided alabastron like those from Tombs 517 and 518. One piece comes from a jug or jar and six pieces are part of a large jar or amphora; there is nothing distinctive in the pattern, but the paint and fabric suggest L.H. I. or II. vases.

L.H. III. Hydria-like jugs, many fragments; patterns mostly parallel bands, but network pattern occurs.

Stirrup-vases, three pieces.

Kylikes, common, nearly all unpainted, but some good painted pieces have spiral and murex patterns, and one an octopus tentacle (?) with added white (Fig. 11, a).

Mugs, one piece.

Deep bowls, common, patterns like those from earlier strata of Lion Gate section. One large piece with spiral has added white.

Kraters, four possible pieces.

Spouted saucer, one piece.

Rhytons (fillers), one piece.

Small cups, three pieces.

There are also part of a breasted jug decorated in 'Close Style,' and the spout of a jug with stirrup handle; and plenty of unpainted and coarse domestic ware.

Terracotta figurines, head of woman.

Against the west wall of the East Basement we sank a pit down to the rock and here much pottery was found, but all of it was L.H. III. Deep bowls, jugs of hydria type, and kylikes were the commonest shapes. There were no sherds of the Granary Class; but in general all the painted pieces—which were not common—resembled those from the earlier strata of the Lion Gate section. Not one sherd of L.H. I. or II. ware was found.

#### DATE.

From this test below the floor of the East Basement and from the similar evidence obtained below the floors of the three corridors, we can conclude that the Granary was built in the L.H. III. Period, for in every test nearly all the pottery found was L.H. III. Earlier sherds were extremely rare, and fragments later in date than L.H. III. never occurred, and not one piece of the Granary Class occurred below the floors. Therefore we may put the building of the Granary fairly early in L.H. III.

Now, since the earth which was thrown back into the Shaft Grave after the removal of its contents contained L.H. III. pottery and nothing

ater, and as the south wall of the East Basement of the Granary rests directly on the south wall of the Grave, it seems certain that the Shaft itself is earlier than L.H. III. It may have been discovered and robbed during the laying of the foundations for the East Basement, or, when the Grave Circle was being built to protect the six Royal Graves that lie within it, the contents of this may have been taken out and reinterred somewhere within the Grave Circle. It is not easy to date our grave owing to the scantiness of the evidence. The gold discs are not so elaborate as those from Schliemann's Shaft Graves which are L.H. I. Thin gold rosettes like those of the second size are common in L.H. II. tombs, as for instance Tomb 515. Glass beads do occur in the Shaft Graves, and in L.H. I. and II. contexts, but beads of this type are also found in tombs that are L.H. III. Boar's tusks from leather helmets occur in L.H. I. and II. The spindle whorl is of an ordinary L.H. III. type and probably intrusive, having got into the grave after the removal of the contents.

It is, however, remarkable that, while in the test pit sunk below the western part of the floor of this basement not one sherd of L.H. I. or II. ware was found, there were eleven L.H. I. or II. sherds in our Shaft Grave. On the whole, on reviewing the finds, this Shaft Grave does not seem to be of so early a date as those found by Schliemann, but, as it was opened in L.H. III., it must be earlier than that period. Provisionally then we can date it as not later than the end of L.H. II., and not much earlier than the end of L.H. I., for Schliemann's Graves do not come down quite so low as the end of L.H. I.

#### NAME OF THE BUILDING.

To return to the Granary, this building, with its long narrow corridors and deep basements, does not seem to have been a house. Its plan is quite different from those of the South House and Warrior Vase House. On the other hand the corridors suggest the magazines and store-chambers of Knossos and Phaistos, and of such Cretan houses as those at Tylissos and Nirou Chani. Schliemann's finds in the West Basement and our own finds in the East Basement shew that these rooms (15, 16) at least were used as store-chambers. Since one of its uses seems to have been as a store-house for grain and similar produce, we have called it the Granary. It occupies a prominent position since it is the only building

between the Grave Circle and the Lion Gate, and also, unlike most of the buildings within the citadel, it abuts on the acropolis wall. For these reasons it is suggested that it may have been some kind of official store-house. It may have served either as a magazine for military stores for the royal bodyguard, or else as a store-house for grain or other produce received by the king as taxes paid in kind by his subjects.

#### THE TWO PERIODS OF THE BUILDING.

The southern ends of the East and West Corridors form a peculiar addition to this part of the Granary.<sup>1</sup> That they are an addition is clear from several indications. The southern ends (south of 10, 11, cf. Fig. 15) of the walls of these two corridors are not in the same line with the rest. The bend in the three walls is very marked and falls exactly in the line of the south front with the window directly opposite the entrance to the Grave Circle. The southern extension of the east wall of the East Corridor is not of uniform thickness. The upper part of the wall is thinner than the rest and appears to be built on a low earlier wall (between 10 and 21), the broken end of which still projects a little further to the south. The low stone buttress (19) in the angle outside the south end of the West Corridor and the Staircase, is later than the south front with the window, because it covers the foundation plinth of the south front. It seems clear from these considerations and from their peculiar plan that the south ends of the East and West Corridors are an addition, and that the original south front of the Granary was in the same line with the south front by the Staircase and runs straight along the line marked by the bends in the corridor walls. This removes one difficulty; the relations of the Granary and the Grave Circle (Fig. 15). At present the south ends of the corridors obscure the entrance to the Grave Circle from the Lion Gate. Now, however, we see that before this addition was made, the way from the Lion Gate to the Grave Circle was clear and open. This stage is shewn in the restored perspective view in Pl. XVIII. Where the entrance to the Granary was in its first period is not known; it may have been at the original south end of the East Corridor, but no evidence on this point is now obtainable. The position of the later entrance is connected with the Ramp.<sup>2</sup>

It has been suggested that the Granary originally extended further

<sup>1</sup> See p. 38.

<sup>2</sup> See p. 63, below.

to the north and was cut through when the acropolis wall was built. This is impossible because the building stands on a mass of fill held up by the acropolis wall. The rock slopes so sharply to the north at this point that no building of this size could have been constructed except on an artificial terrace. The surface of the rock 10 m. to the north of the acropolis wall (by 3) is 4 m. lower than the floor of the Shaft Grave below the East Basement of the Granary. It is thus obvious that no building existed on this site before the construction of the acropolis wall



FIG. 15.—GRANARY FROM THE SOUTH WITH LION GATE FROM WITHIN, ENTRANCE TO GRAVE CIRCLE, AND FOOT OF GREAT RAMP.

enabled an artificial terrace to be made. The buttress (20) outside the west wall of the West Basement at the bottom shews again how necessary it was to support any building here effectively. The walls of the Granary too are not cut through by the acropolis wall but are built against it. It would have been impossible to build the acropolis wall while any part of the Granary was still standing right against it.

### 3. THE RAMP

The roadway that enters the citadel of Mycenae widens out into a broad highway, once it has passed through the Lion Gate and its flanking



walls (Fig. 15). On the left or east it is bordered for a distance of over 12 m. by a Cyclopean terrace wall (9) built of large blocks of stone packed with earth and small stones and still standing to a height of 3.50-4.00 m. This wall abuts on to the end of the eastern flanking wall of the Lion Gate, but without bonding with it, and therefore should be later in date. It seems to have no connection with the bordering walls of the road further to the south (26, 27) and would probably have been made for one of two purposes—either, at rather a late date, to prevent the loose earth from sliding down over the sloping rock and blocking the road, or in order to hold up an artificial terrace to give more space for some building on the higher ground to the east. Without further examination of this ground immediately to the east this point cannot be decided. The style of its construction gives no clue to its exact date, but it probably belongs to the same period as the additions to the Granary.

#### DRAINS.

Between this wall and the east wall of the Granary two drains pass under the road. The northern drain runs across at right angles, but the southern runs obliquely from south-east to north-west and unites with the other under the east wall of the Granary. From this point (see the Plan, Pl. I. and section, Pl. XVII.) the drain runs west under the East and West Corridors till it reaches the East Basement where it makes a sharp turn to the north-west to avoid the Shaft Grave. Thence it runs on till it reaches the acropolis wall, where it turns westwards and dips down so steeply and becomes so narrow that it could no longer be followed up. Under the Granary the drain varies in height from .90 to 1.25 m. and in width from .25 to .50 m. It is built directly on the rock with vertical sides of rough stonework. The roof is formed by inclining stones against one another so as to form an inverted V. A certain amount of pottery was found in clearing out this drain, but nothing of any importance; there were two L.H. I. and eleven L.H. III. sherds: among the latter deep bowls were the commonest shape. As this drain runs under the Granary it must be either earlier or contemporaneous with it. As it avoids the Shaft Grave it must be later than it. On the whole it seems more likely that these drains are contemporaneous with or at best only slightly anterior to the Granary, and formed part of the general replan-

ning and rebuilding of the citadel of Mycenae which seems to have taken place about the beginning of L.H. III.

#### THE WIDENING OF THE ROADWAY.

We have already called attention to the fact that the south extension of the east wall of the Granary has a wide base, as though when this part of the extension was made it was laid upon an earlier wall. This opinion is confirmed by the fact that the broken end of this presumed earlier wall projects beyond the existing end of the east wall of the Granary (21). Further to the south there is another broken wall end (23) at the northern foot of the high supporting wall of the Great Ramp. These two broken ends have the same alignment, see the Plan, Pl. I., cf. Fig. 15. This line, now broken, once formed in all probability the original supporting wall of the roadway on the west running from the foot of the Great Ramp to the original south-east angle of the Granary, as shewn in the restored perspective view in Pl. XVIII. Later, when the addition was made to the East and West Corridors of the Granary, and the threshold put in its present place, the supporting wall of the roadway was thrown out further to the west (22) so as to secure a comfortable approach to the threshold of the Granary, which lies rather high, direct from the road. On the east side of the road what seems to have been its original edging wall can be seen at the foot of the unexcavated bank (26). Here, the level of the actual road seems to have been 43.04, and as the level of the threshold is 42.87, it is clear that such an approach was perfectly easy. We dug one or two tests underneath the later western supporting wall (22) of the roadway and extracted a certain amount of pottery. Of this two-thirds was M.H. and the remaining third L.H. III. This evidence confirms the view just expressed, which provides a reasonable explanation, (1) for the peculiar bend in the East and West Corridors of the Granary; (2) for the oblique terrace wall (22) running from the Granary to the foot of the Great Ramp; and (3) for the concealment of the entrance to the Grave Circle from anyone entering the Lion Gate.

#### *Early and Middle Helladic Strata.*

Just at the north foot of the Ramp we sank two trial pits in the roadway to test the stratification. The level of the road here is no longer preserved as it was dug away during Schliemann's excavations.

The southernmost of these pits, which was dug in a series of arbitrary levels, gave good stratification thus :—

I. 39·82–40·53. In this layer, which begins from the native rock, all the pottery was E.H. and nearly all belonged to Blegen's second class, Group B. II. (*Korakou*, p. 6 ff.) were covered all over with glaze paint. Forty-one sherds had red paint, six black, and two were mottled. Of the red painted sherds three were parts of flat bases, and among the vase shapes askoi, shallow bowls and jars and jugs were recognisable. There was one piece of black polished ware, and one incised fragment of coarse ware and part of an unpainted askos. Eleven sherds were of coarse unpainted ware.

II. 40·53–40·65. Here again all the pottery was E.H. Thirty-seven sherds were of coarse domestic ware including one flat base and one possible fragment of a sauceboat. Other unpainted sherds comprise three handles of askoi, an incised handle from a jug (Pl. XII. *g*) like those from the tombs at Corinth,<sup>1</sup> four pieces of the necks of jugs decorated with slashes, and part of the base of a vase shewing the impress of the wickerwork mat on which it was made. The painted sherds with two exceptions belong to Blegen's second class, Group B. II.; forty are covered with black glaze paint, among which are to be noted three flat bases and three heavy rims (Pl. XII. *k*, *l*, *n*), one being incised, from bowls of the typical E.H. shape.<sup>2</sup> There were eighty-four fragments with red paint, among which are five flat bases, a twisted ropework handle (Pl. XII. *j*), and three incised sherds (Pl. XII. *m*). The remaining nineteen sherds are mottled. The shallow bowl is the commonest shape in all this painted ware. Two small sherds shew parts of simple linear designs in red on a red or red-buff ground (cf. Pl. XII. *i*).

III. 40·65–40·89. In this level except for three sherds of M.H. ware (two being of Matt-painted Group I., and one of plain polished ware), all the pottery was E.H. Thirty-four are unpainted or coarse E.H. sherds, four pieces of plain askoi, and there is an odd object like a small lid with a knob, or perhaps a flat round stamp with a short handle at the back. All the rest of the E.H. ware belonged as before to Blegen's second class, Group B. II.: sixty sherds with black paint, including one flat and one raised base, one possible piece of a sauceboat, and many fragments of the typical bowls. There were thirteen mottled sherds, including two raised bases, and eighty-nine red painted sherds. Among the latter are three raised bases, one flat base, three incised rims (Pl. XII. *a*, *c*, *f*), two pierced lugs and two specimens of an odd type of handle (Pl. XII. *d*). There was also a piece of obsidian of a pale brown colour and very transparent, which hardly seems to be Melian.<sup>3</sup>

<sup>1</sup> *A.J.A.* 1897, p. 319, I, 2; I, 4; I, 5.

<sup>2</sup> Blegen, *Korakou*, p. 12, Fig. 13.

<sup>3</sup> Melos is possibly not the only source of obsidian in the Aegean (cf. *Phylakopi*, pp. 216 ff.): there are rumours that it is to be found in the Methana peninsula in Argolis and the Italian Mission has found it on the island Gyalí between Nisyros and Cos:

IV. 40·89-41·04. Here more M.H. ware was found; five sherds of Matt-painted, Group I.,<sup>1</sup> three of Group II., twelve of ordinary Grey Minyan ware, and one polished yellow piece. There were twenty-seven fragments of coarse domestic ware of which some would be Middle and some Early Helladic. Of unpainted E.H. ware there were two pieces of askoi and three rims from small store jars. Of painted E.H. ware, which was all of Group B. II., there were forty-eight sherds with black paint, including four raised bases, thirteen mottled sherds, including one flat base, and about fifty red sherds, including four flat bases, one incised rim (Pl. XII. *b*) and one handle of the odd type already mentioned (cf. Pl. XII. *d*). In all this E.H. ware, the commonest shape is a shallow bowl with heavy rolled rim. On either side just below the rim (Pl. XII. *b*, *c*, *k*, *l*) there are short raised ledges which end in small knobs apparently serving the purpose of lugs and occasionally pierced for suspension or for fastening a lid.

V. 41·04-41·37. Here there were only thirteen E.H. sherds, all of Group B. II., but there were nine sherds of coarse domestic ware, some of which may be E.H. All the rest, apart from one L.H. III. sherd, were M.H. Of M.H. fabrics there were twenty-nine sherds of Matt-painted, Group B. I., six of Matt-painted, Group B. II., thirty-nine of Grey Minyan ware, and eleven sherds of the so-called Argive Minyan,<sup>2</sup> with a red biscuit and a black polished surface. There were also twenty-one fragments of unpainted polished M.H. ware. In the Matt-painted ware, especially that of Group B. I., the commonest shape is a wide bowl with a vertical rim with a panel decoration like the examples from Aphidna,<sup>3</sup> Korakou,<sup>4</sup> Aegina<sup>5</sup> and Argos.<sup>6</sup>

VI. 41·37-41·69. At 41·37 there was a floor or road level which was probably of the M.H. age, since M.H. pottery was found both above and below it. Here, of M.H. fabrics, there were ten sherds of Matt-painted, Group B. I., six of Matt-painted, Group B. II., six of Grey Minyan ware, and six of unpainted, but polished ordinary M.H. pottery. There were twenty sherds of L.H. III. ware, and seven pieces of coarse domestic ware, which may be either M.H. or L.H., and four Hellenistic sherds.

VII. 41·69-42·00. In this uppermost level the earth had clearly been disturbed and the pottery found has practically no stratigraphic value. There were two sherds of M.H. (Grey Minyan) ware, nine pieces of L.H. III., the torso of a terracotta figurine of an ox, two Orientalising sherds, seven Hellenistic pieces, and a loom-weight of the ordinary pyramidal Greek type. This last shews on its sides three impressions of a stamp representing a dancing woman, and on its base two impressions of a stamp with a tortoise.

The evidence from the other pit corresponds entirely with that just detailed, and we thus see that on the surface of the rock there is

<sup>1</sup> See Blegen, *Korakou*, pp. 19 ff.

<sup>3</sup> Wide, *Ath. Mitt.* 1896, Pl. XV., 4-6.

<sup>5</sup> 'Εφ. 'Αρχ. 1895, Pl. X., 7.

<sup>2</sup> Blegen, *Korakou*, p. 17.

<sup>4</sup> Blegen, *op. cit.*, p. 22, Fig. 30.

<sup>6</sup> *B.C.H.* 1906, pp. 22, 23, Figs. 29, 30.

a good E.H. stratum, above which comes a M.H. stratum. Above the M.H. the earth seems to have been disturbed, and this we shall find is also the case in the Grave Circle, since not only in the roadway, but also in and around the Grave Circle, M.H. pottery is found immediately below the present surface. Of course, owing to the previous excavations<sup>1</sup> one cannot now ascertain what the original circumstances before excavation were.

The E.H. ware seems, generally speaking, to be of an early rather than of a late type, for it agrees well with the earliest E.H. ware from Korakou. At that site Blegen<sup>2</sup> says red painted ware was at first more frequent than black, and among the earlier examples raised bases are lacking. Incised ware too according to the Korakou evidence is early. The sauceboat, a shape which belongs to the more developed stages of E.H. ware, is lacking in the earliest strata at Korakou, and is extremely rare here, though as we shall see it does occur among the more developed E.H. ware from Mycenae.<sup>3</sup> This evidence from Mycenae is important as shewing that the site was inhabited early in the Bronze Age, and secondly as confirming Blegen's conclusions based on the finds at Korakou as to the earlier stages of E.H. pottery. We can thus say that these two groups from Korakou and Mycenae represent the first stage in the evolution of E.H. wares, the second being provided by the pottery from Tiryns and Zygouries.<sup>4</sup>

#### THE WALLS OF THE RAMP.

At the foot of the Great Ramp itself there is at the end of the wall on either side a large rectangular block of conglomerate (24, 25). That on the west is flush with the rest of the wall, but that on the east (25) though flush with the present face of the wall projected about a metre from the original wall (27) at this point. Behind the present wall face there is to be seen the lower part of a wall well built of rectangular blocks of conglomerate (27), which exactly corresponds to the two end blocks mentioned. We have already observed in relation to the Lion Gate that the Mycenaean in L.H. III. times used ashlar work in conglomerate to give a monumental and finished effect to important walls at entrances. It is thus just possible that between these two conglomerate blocks at

<sup>1</sup> Cf. Tsountas, *Πρακτικά*, 1890, p. 35.

<sup>2</sup> *Korakou*, p. 5.

<sup>3</sup> See below, p. 114. <sup>4</sup> *J.H.S.* 1921, pp. 260 ff.; *Art and Archaeology*, XIII., pp. 209 ff.

the north foot of the Ramp there was once an inner gateway of which no trace now remains, as all the ground immediately to the north of them was dug away in Schliemann's excavations. We may therefore consider the conglomerate wall on the east as the original boundary wall of the roadway here. At some later date it was masked, with what object we do not know, by a rubble wall with a wooden frame-work set in it, to hold the superstructure of crude brick. This later wall is flush with the conglomerate block at the north end. The sketch in Pl. XVI. *a* gives an elevation of this rubble wall shewing clearly how the timber frame-work was set in, and was stepped upwards according to the incline of the Ramp. On the west side of the Ramp the parapet that looks over the Grave Circle seems to have been stepped upwards in a similar manner<sup>1</sup>; traces of it can still be seen. This stepping has accordingly been indicated in the restored perspective view in Pl. XVIII.

The Ramp is built on the sloping rock face just on the line where the hard limestone and the soft rock meet. It is supported by the massive Cyclopean wall which towers above the Grave Circle (Pl. XV), and behind this the foundation of the roadway is closely packed with enormous blocks of limestone. We made several small tests where possible under the foundations of the supporting wall and in crannies in its lower face. In every one of these tests L.H. III. pottery was found. The Ramp thus, like the Lion Gate and the fortifications, would fall at the beginning of the fourteenth century B.C. The Ramp at Tiryns which is in every way similar in construction belongs to the third period of the walls of that fortress; which is a trifle later in date than the beginning of L.H. III. Still, we have in the Ramps further evidence for the correspondence between the two citadels.

The Ramp climbs steadily upward for a distance of about 25 m. and then stops abruptly. At its south end it is shut off by a cross supporting wall (28) running eastwards. Excavation to the south revealed nothing but a series of four small rooms (30-35) of Hellenistic date<sup>2</sup> built up against a Mycenaean (L.H. III.) terrace wall to the east. But even this terrace wall does not seem to have any connection with the Ramp. The area immediately to the east of the top of the Ramp has

<sup>1</sup> Edward Lear seems to have thought that the dromos walls of the Treasury of Atreus were similarly stepped (see his view of the Argive Plain from Mycenae in the Library of Trinity College, Cambridge), compare, however, Pl. LVI. and Fig. 69.

<sup>2</sup> See below, pp. 68 ff.

been much disturbed by previous excavation, but deserves a careful re-examination. The roadway which climbed the Ramp clearly led up to the Palace on the summit of the citadel. Much higher up the slope of the hill to the south-east Tsountas<sup>1</sup> found the continuation of the roadway supported by a great Cyclopean wall which contains many rough blocks of conglomerate. The continuation leads up to the entrance lobby at the foot of the Grand Staircase of the Palace on the south.<sup>2</sup> But between the top of the Ramp and the point where Tsountas picked up the course of the road again, no trace either of the road or of its supporting wall can be found, for the Mycenaean ruins here have been very much disturbed by Hellenistic houses. Since the Ramp did not continue southwards, we may assume on the analogy of Tiryns that at its south end the road turned at right angles to the east for a little distance, and then turned again to the south-east up the hill towards the Palace.

#### THE HELLENISTIC CHAMBERS.

Immediately to the south of the Ramp there are four Hellenistic rooms (30-35) built up against a Mycenaean terrace wall (29), the purpose of which latter cannot be determined without examination of the ground above it to the east. The four Hellenistic rooms lie between this terrace wall and the wall directly above the so-called Little Ramp to the west (Fig. 16). This latter wall is clearly also Hellenistic.

In the northernmost chamber (30) we found as indicated in the plan (Pl. I.), one complete pithos still standing upright against the north wall. This is .42 m. in diameter at the top and about 1 m. high. Its bottom had been broken in ancient times and mended with part of another pithos set on with lead rivets. Probably a row of pithoi stood along the north wall of this first room, because by the side of the complete example we found many fragments of others similarly joined with lead rivets. The curious thing is that in these again the pieces joined together do not belong to the same pithos. The rivets are from .012 to .015 m. wide and average .06 m. in length. They are let into holes just like modern rivets used in mending broken china, but are always applied both sides, and have the outer surface rounded. The cracks

<sup>1</sup> *Πρακτικά*, 1895, p. 24; 1896, p. 29; see below, p. 148.

<sup>2</sup> See below, p. 148.

between the broken pieces so joined together were filled up with molten lead poured into them.

The second chamber (31) from the north has a cement floor over the western part. This had a raised edge along its east side and in its north-east angle a sunk pit .60 m. deep and .45 m. wide, with a small channel running into it. It was probably a wine-press, and in the north-east angle of the chamber stood a large pithos badly cracked and much damaged. Against the middle of the south wall was found a nest of Hellenistic lamps of which several were unbroken. They have a small



FIG. 16.—HELLENISTIC CHAMBERS AT THE TOP OF THE RAMP FROM THE SOUTH.

round hole in the centre on top and a rough projecting knob on the right side, probably intended for the finger to rest against.<sup>1</sup>

The dividing wall between the second and third chambers apparently did not run right across, but stopped where the cement floor begins in the second chamber. The east part of the third room was not floored; in the south-west angle was a roughly-laid floor of flat rectangular tiles on which still stands a terracotta bath of the usual late Greek type (32). It is badly broken, only the lower end being preserved (Fig. 16), but is of the same type as the almost complete example found in the Hellenistic house above the South House (Figs. 23, 24). There is a perfect example in the Nauplia Museum which was found by Tsountas during his excavations at Mycenae. The example from this room in its present condition

<sup>1</sup> Cf. *B. M. Cat. Lamps*, p. 42, No. 301, Fig. 38.



is .55 m. wide, about .55 m. long, and .30 m. high. At the one end there is a raised seat, and at the narrower end a circular depression in the floor. Though these are always taken to be baths, yet it is not quite obvious what a bath would be doing in connection with a wine-press. Possibly this example was used for some other purpose.

The fourth chamber (34) is entered from the third by a small door near the west end of the dividing wall. The eastern part of the fourth room seems to have had a cement floor, of which some traces are still left. In the south-west angle is a big foundation of worked poros blocks (35). These obviously once formed part of some earlier construction, for one of them from the cuttings on it (it now stands on its side) was once the bed of an olive-press. Against the centre of the south wall stands what was apparently a deep mortar cut out of part of an unfluted column shaft (33, .56 m. in diameter and .66 m. high). Just west of the mortar is a flat round stone (.50 × .70 m.), laid in the floor. Against the west wall, as indicated in the plan, was found lying face downwards, as though it had been used for flooring, the stone with the Hellenistic inscription published in Section XI. below.<sup>1</sup>

These four chambers which intercommunicate (for there seems to have been a door in the wall between the first and second) were not apparently part of a house. They seem rather to have formed part at least of an establishment for making wine and oil. To judge by the re-used blocks in the fourth or southernmost chamber they were probably reconstructed in part. As the inscription which seems to have been used as part of the flooring can be dated to about 195 B.C., such re-modelling of these chambers would have taken place not earlier than the latter part of the second century B.C. In any case the owner of this establishment, to judge by the riveted pithoi and the patchwork floor of tiles underneath the bath, does not seem to have been able to equip his establishment with proper plant. In these chambers quantities of curved late Greek tiles were found, which were obviously the remains of the roof.

#### FINDS.

##### *A. Pottery.*

Besides the lamps and pithoi already mentioned, much late Greek pottery was found in the chambers including fragments of Megarian bowls, tear-

<sup>1</sup> Pp. 408 ff.

bottles, part of a Hellenistic *lagynos* and much ordinary Hellenistic ware with black or brown glaze similar to that found above the Granary, among which two brown, partly glazed jugs with trefoil lips are noticeable. Two handles from Rhodian amphorae were found, one shews part of a stamp with ΕΠΙ . . . The stamp on the other is much worn; the letters cannot be read and the device, which resembles a horse's head, is far from clear. There were many loom-weights of the ordinary Greek pyramidal type, one of which has a star impressed on it like one found in Tomb 522. In the chambers was a certain amount of badly broken L.H. III. pottery. Below the floors there was a good deal of L.H. III. ware, including some pieces of good early style. There were also three or four sherds from big amphorae of Palace Style (L.H. II.) similar to those from the Tomb of Aegisthus, especially Nos. 1, 3, from the dromos, and No. 8 from the tholos.<sup>1</sup> Other pottery comprised some pieces of quite good black glazed ware probably of the fifth or fourth centuries, and close on the rock below a certain amount of M.H. pottery was found.

#### *B. Miscellaneous.*

Miscellaneous finds include five fragments of terracotta figurines of women, and two of figurines of animals, perhaps oxen, and part of a chair; all are of the usual Mycenaean (L.H. III.) style. There were also part of a small terracotta slab (.06 m. high × .08 m.) with triglyph and metope, and one stone rubber, from the first chamber, a bronze arrow-head (.034 m. long), a bronze boss (.042 m. diam.), and an iron spear-head (.265 m. long); and from the second chamber a bronze rod (.24 m. long), the curved handle of a bronze pail (.205 m. diam.), and several iron nails and many fragments of lead. None of these seems to be Mycenaean.

#### THE LITTLE RAMP.

Below these four Hellenistic chambers to the west lies the so-called Little Ramp. This, like the Great Ramp, is built up with large rough blocks of limestone packed up on the sloping rock, as it is just at this point that the upper hard limestone descends sharply to the soft rock below. In origin the Little Ramp seems to be Mycenaean, and as tests underneath its western supporting wall produced L.H. III. pottery, it was probably first built in the general reconstruction and enlarging of the citadel that took place early in the fourteenth century B.C. It seems, however, to have undergone some alteration in later, probably Hellenistic, times. It is, however, impossible to verify this, or even to decide the first purpose of this Ramp, till the unexcavated area lying immediately to the south is explored.

<sup>1</sup> See pp. 309, 314, below.

Towards the foot of the Little Ramp a wall is built across it. This was clearly intended to help sustain the heavy fill of which the upper part of the Little Ramp is composed. Below this cross wall to the north the Ramp was composed of a sloping mound of earth (36). We excavated this to the rock and found quantities of pottery; it was dug in three levels, but they shewed no stratification, thus indicating that the soil here was packed in as fill to make the bottom of the Ramp. A little M.H. ware was found, but mostly at the northern end towards the Grave Circle.

*Pottery found at the Foot of the Little Ramp.*

This pottery may be classified as follows :—

The first, uppermost, level contained :—

Middle Helladic, Minyan ware, four sherds.

Matt-painted, Group B. I., five sherds.

Group D. I., one sherd.

Late Helladic I., one piece of a cup of the Vaphio or Keftiu type, and the spout of a beaked jug similar to the fine specimen with double-axes from Tomb 518.

Late Helladic III.; the following shapes were recognised :—

Stirrup-vases, eight pieces, one of which has a poorly drawn design of birds (Pl. XIV. c).

Mugs, four pieces, one with the thrush-egg or stippled pattern.

Kylikes, twenty-four painted pieces, among which the murex pattern is common, and seventeen unpainted sherds.

Deep bowls and kraters, twenty-seven pieces similar to those from the earliest strata of the Lion Gate section.<sup>1</sup>

Hydria-like jugs, fourteen pieces.

Shallow bowls, four sherds.

Rhytons, three; one with a murex design and with dappled markings is possibly L.H. II.

Pyxides, two sherds.

There were forty-one miscellaneous sherds painted and plain, and one light-on-dark L.H. III. fragment, four animal terracotta figurines, seven female, and two small chairs.

The second, middle, level contained :—

Middle Helladic, Minyan ware, one sherd.

Matt-painted, Group B. I., six sherds.

Group D. I., two sherds.

Plain polished, three sherds.

<sup>1</sup> See above, pp. 20 ff, Figs, 6, 7.

Late Helladic II., five sherds from shallow bowls or cups, three of which shew the thrush-egg or stippled pattern.

Late Helladic III.

Stirrup-vases, three sherds.

Kylikes, painted, eighteen, unpainted, nine sherds.

Deep bowls, four pieces, one of which is shewn in Pl. XIV *b*.

Goblets, with red or black glaze, nine, one of which has added white.

Jugs of hydria type, two sherds.

Mugs, five sherds, of which two have the thrush-egg or stippled pattern.

There were four handleless saucers of the common unpainted type such as those found below the floor of the room north of the West Portal in the Palace <sup>1</sup>; and twenty-seven miscellaneous pieces painted and plain.

The third or lowest level contained :—

Middle Helladic, Minyan ware, four sherds.

Matt-painted, Group B. I., four pieces.

Plain polished ware, four sherds.

Late Helladic I.-II., nine pieces; two come from a large vase of the Palace Style, like one from the first tholos at Kakovatos <sup>2</sup> one is from an alabastron of typical L.H. II. shape and style (compare the examples from Tombs 515 and 518), two have the thrush-egg or stippled design, and two with a seaweed pattern are possibly Cretan, as they are painted inside as well as out in the Cretan manner.<sup>3</sup>

Handleless cups, one fragment.

Late Helladic III., stirrup-vases, three pieces.

Kylikes, painted, thirty-six (see Pl. XIV. *a*, *g*: they recall those from the dromos of Tomb 505), and fourteen plain sherds.

Mugs, three pieces.

Jugs of hydria shape, eleven sherds.

Rhytons, two fragments, one of which has added white.

Deep bowls, six pieces.

Goblets with red or black glaze, three sherds.

Miscellaneous painted sherds, twenty-two, of which three have added white.

All this pottery, which, as just stated, reveals no stratification, is of good style and fabric, and should date from the beginning of the L.H. III. period. It recalls in particular the vases from Tomb 505, and other early groups of L.H. III. ware, such as the earliest strata from the Lion Gate section.<sup>4</sup> It thus provides us with additional evidence

<sup>1</sup> See below, pp. 150 ff, 218.

<sup>2</sup> *Ath. Mitt.* 1909, Pl. XVIII., 2.

<sup>3</sup> Cf. Bosanquet-Dawkins, *Unpublished Objects from Palaikastro*, pp. 24, 27.

<sup>4</sup> See above, pp. 20 ff.

for dating the two Ramps and neighbouring constructions to the beginning of the L.H. III. period, or soon after 1400 B.C.

A wall (37) lies right at the foot of the Little Ramp and in a line with it, and has its north end resting against the Grave Circle. Its immediate purpose is unknown, but it may have been intended to protect the foundations of the Great Ramp or to prevent soil from being washed down against the south side of the Grave Circle. Since tests below it produced sherds of L.H. III. date, it is to be assigned to the same period as the two Ramps. Among the other pieces from these tests is the interesting fragment of polychrome Matt-painted, Group B. III., shewn in Pl. XII. e, which seems to have been part of a jug, and has an unusual pattern.

#### 4. THE RAMP HOUSE.

Below the Little Ramp to the west lie the scanty ruins of a house now known as the Ramp House (Pl. XIII. c). Schliemann began to excavate it in 1876, but he did not entirely clear it. In 1920 and 1921 we were led to complete its excavation as a result of the discovery of some interesting fragments of fresco <sup>1</sup> found in clearing the walls of rubbish when we were planning the Grave Circle area.

Owing to the earlier excavations and long exposure to weather the ruins are not in good condition, and except over part of the eastern side no stratification could be found as the floors had been dug through.

The main building on this site seems to have been a house of a megaron type. The existing walls are shown on the plan (Pl. I.), as well as a tentative restoration. The entrance seems to have been from the south where there is a small open space just on the edge of the region still unexcavated. It can be restored as a porch (42) or ante-room with short side walls forming the doorway. Behind this to the north lies the main room (40) which was floored with a thin layer of white clay, below which were traces of an earlier, similar floor (see the section, Pl. XVII). To the west lies a series of three small chambers. The most northern (43) of these still has its white clay floor partly preserved, and was perhaps connected by a door with the megaron. The central chamber (44), if connected with the megaron, would have had a door leading into the porch. Under this chamber lay a basement

<sup>1</sup> See *B.S.A.* xxiv, pp. 189 ff., Pls. VII.-X.

room entered by an independent doorway from a lower level to the west. Its threshold is paved with small stones covered over with hard stucco. The southern chamber (45) has no visible means of communication with the rest of the house and apparently was not even used as a basement, as there is no entrance from the low level on the west. The existing walls were probably filled with shot earth and stones to serve as foundation for a room on the upper level. On the east between the megaron and the supporting walls of the Little Ramp there is a long narrow space (41) the purpose of which cannot now be determined. No certain floor was found in it and no plaster on the walls. It may have served as an inclined passage leading up to rooms over the megaron, but this hardly seems likely. More probably it was a store gallery, and as such it has a strong resemblance to the long corridor on the east side of the megaron at Phylakopi.<sup>1</sup> Still it seems strange that it should have been neither floored nor plastered, and it is just possible that this long narrow space was filled with shot earth and stones so as to serve as a buffer between the Ramp House and the walls and rock which support the Little Ramp to the east.

The house was the largest building constructed on this site, and, to judge by the pottery found above the floor in the megaron and in the northern chamber, dates from the Third Late Helladic period. Further details of the stratification are given below. Even so the house seems to have been reconstructed. An outer wall was built along the north end and at the same time a much thicker wall was imposed above the west wall of the megaron, and the earlier wall that lies alongside of it. On the top of this latter piece of reconstruction lay a large threshold of white limestone with a pivot-hole at one end. Its position is marked in Steffen's plan,<sup>2</sup> but there was no means of knowing whether it was *in situ* or not. This reconstruction may be connected with the two clay floors already noticed in the megaron. Below the floor levels of the Ramp House lay earlier walls (see the section, Pl. XVII.), one along the inside face of the west wall of the megaron, and others forming the east end of a rectangular building below the east side of the megaron and the narrow corridor. The south wall of this is at one point partly torn away to make room for the foundations of the east wall of the megaron. These lower

<sup>1</sup> Fimmen, *Kretisch-Mykenische Kultur*, p. 54, Fig. 44.

<sup>2</sup> *Karten von Mykenai*, Pl. II.

walls are from their level undoubtedly earlier than the Ramp House, and from the pottery found in connection with them date from the First or Second Late Helladic period. At a still lower level, and built on the rock are two broken walls that seem still earlier, as they have no connection with the L.H. I.-II. walls. These must be earlier than L.H. I., and to judge by the pottery found in the lowest level on the rock would be of M.H. date.

#### MIDDLE HELLADIC GRAVES.

Finally, the earliest traces of human occupation of this site were found in three shallow graves cut in the rock.<sup>1</sup> One of these lay partly below the west wall of the basement (44) just to the south of the entrance to it. This was a very shallow cutting in the rock .75 m. long, .29 m. wide, and less than .30 m. deep; in it lay the skeleton of a child about three-quarters grown in the usual contracted attitude, lying on the right side with the head to the north (Fig. 17, *a*). No vases or other objects lay with the bones, but only a few miscellaneous M.H. sherds. Another lay below the north end of the megaron (40) and is 1.26 m. long, .77 m. wide and .50 m. deep (Pl. XIII. *c*). The skeleton had been removed and the grave plundered probably when the Ramp House was built. Consequently, nothing was found in it, apart from some miscellaneous M.H. and L.H. II. and III. potsherds, and an interesting bronze arrow-head (Fig. 18), which is of an early type.<sup>2</sup> The third grave (39) lay just outside the north wall of the megaron towards the Grave Circle (Pl. XIII. *c*). This was a shallow (.20 m. deep) rectangular cutting in the rock, and measured 1.19 m. by .70 m. In it lay one skeleton on its left side with the head to the south in a contracted attitude (Fig. 17, *b*). Nothing was found with it, but in the earth which had percolated into the grave were several small pieces of M.H. pottery, one of which was actually below the neck bones.

These three graves are clearly of M.H. date and correspond to that found below the East Room of the South House, which contained a M.H. vase.<sup>3</sup> They also correspond to those found by Schliemann near the Third Shaft Grave,<sup>4</sup> and by Stamatakes<sup>5</sup> in the eastern part of the Grave

<sup>1</sup> Cf. section, Pl. XVII.

<sup>2</sup> Cf. Montelius, *Grèce Préclassique*, I, Pl. XV, 3.

<sup>3</sup> See below, p. 94, Fig. 21.

<sup>4</sup> *Mycenae*, p. 162: see below, p. 118.

<sup>5</sup> Tsountas-Manatt, *Mycenaean Age*, p. 97.



*a*



*b*

FIG. 17.—RAMP HOUSE: MIDDLE HELLADIC GRAVES.



Circle. They are similar to the M.H. graves of Orchomenos,<sup>1</sup> Tiryns,<sup>2</sup> Zygouries<sup>3</sup> and Gonia.<sup>4</sup> The two graves at the north end of the Ramp House, especially that below the megaron, are in form primitive shaft graves, and apart from the rough stone wall which lines the latter, it is of the same general type as the Second Shaft Grave. The Shaft Graves in themselves are after all only elaborate versions of the ordinary M.H. cist grave hollowed out in the rock. Besides the three graves described under the Ramp House there are three more shallow rock cuttings (shewn on the plan with hatched edges) under the north wall of the megaron which may have once been graves of the same class. These graves are further discussed in connection with the Grave Circle.<sup>5</sup>

#### EARLY DRAIN.

Cut in the rock below the porch of the megaron (at 42) is a drain about .50 m. wide and .50 m. deep which runs obliquely from east



FIG. 18.—RAMP HOUSE: BRONZE ARROW-HEAD  
FROM M.H. GRAVE. (Scale 2 : 3.)

to west. Shallow cuttings in the rock on either side shew that it was once roofed with slabs. In this were found forty-two potsherds of plain or indeterminate ware, and sixteen painted sherds which are L.H. II. or earlier. We can thus conclude that this drain had most probably some connection with the L.H. I. and II. walls, which lie below the Ramp House. Otherwise, if the drain had been constructed for the Ramp House we should have expected to find some of its roof slabs still *in situ*, and some L.H. III. pottery in the rubbish in it. It should also be noted that among the plain pottery the so-called Yellow Minyan ware and kindred fabrics predominate.

In clearing the ruins, as already stated, stratification was only found on the east side where the clay floors of the megaron still existed in part.

<sup>1</sup> Bulle, *Orchomenos*, i. Pls. XXII.—XXVI., pp. 61 ff.

<sup>2</sup> *Ath. Mitt.* 1913, p. 85; Fimmen, *Kretisch-Mykénische Kultur*, p. 12; cf. *Tiryns*, i. p. 129, Grave 14 which is not of the period of Geometric pottery, but Middle Helladic, see the vase of Minyan shape, Pl. XV., 11.

<sup>3</sup> Blegen, *Art and Archaeology*, xiii. p. 211, xv. p. 88.

<sup>4</sup> *A.J.A.* 1920, pp. 6, 7.

<sup>5</sup> See below, pp. 117 ff.

In the megaron itself above 40·45, which was the level of the latest floor (see the section in Pl. XVII.), only three sherds other than L.H. III. were found, and these occurred at a point where the stratification had been disturbed. In the layer between 40·45 and 40·05 which was the level of the lower floor, the bulk of the pottery (one hundred and eighty-five pieces) was L.H. III., mostly of early style, but there were over thirty L.H. I.-II. pieces. In this and the next layer below (40·05-39·93) in which the proportion of L.H. I.-II. ware was greater, there was found a quantity of fragments of fresco already published.<sup>1</sup> Below 39·93 down to the rock at 39·81 the pottery was mainly M.H., although on the rock itself and in one or two small pockets some E.H. sherds came to light. Some L. H.I.-III. ware occurred also in these lowest strata, indicating that the main buildings in this area would have been erected in L.H. III.

In the corridor to the east of the megaron on the surface was found a late Greek tile inscribed . . . ΕΟΦΙΛΟ . . . In the uppermost layer between the walls (41·49-41·03) there was no definite sherd of L.H. I.-II. ware, but all the pottery as far as it can be identified, except for five fragments of M.H. ware, was L.H. III. In the next layer below (41·03-40·74) there was again no definite sherd of L.H. I.-II. ware, and, except for some seven small intrusive sherds of M.H. ware, all was again L.H. III. At this level much decomposed mud brick was found. Below this between 40·74 and 40·00, though L.H. III. was the commoner, there was a considerable amount of L.H. I.-II. pottery and some M.H. ware. In this stratum, too, many fragments of fresco were found.<sup>2</sup>

#### *Pottery.*

The pottery can best be tabulated thus :—

Middle Helladic, Minyan ware, nine sherds.

Plain polished, eight pieces.

Matt-painted, Group B. I., fourteen sherds.

Group B. II., two sherds.

Group B. III., five sherds.

Light-on-dark, Group D. I., two pieces.

Late Helladic I.-II., thirty-two sherds.

Ephyraean ware, seven sherds.

Handleless cups, five sherds.

Red and black glazed ware, thirty sherds.

<sup>1</sup> *B.S.A.* xxiv., pp. 189 ff., Pls. VII.-X.

<sup>2</sup> *B.S.A.* xxiv. *loc. cit.*

## Late Helladic III.

Stirrup-vases, four, and large one in poor condition (.45 m. high) covered with black glaze paint which once carried decoration in white, Fig. 19, *a*.

Kylikes, painted, sixteen (one with an octopus pattern has added white), and thirty plain sherds.

Jugs of a hydria type, eleven.

Alabastra, one.

Deep bowls, nineteen.

Mugs,<sup>1</sup> twenty, nearly all with the thrush-egg or stippled pattern, see Pl. XIV. *h*, *i*.

Shallow bowls or cups, with thrush-egg or stippled pattern, two.

There was much unpainted domestic ware and seven terracotta figurines of animals and one of a woman, two small chairs or stools, also of terracotta, two small conical steatite whorls, a broken bead of blue paste, a broken whorl of terracotta and a small saw of white flint, .05 m. long.

The L.H. III. pottery from this stratum is of an early type and compares well with that from the earlier strata of the Lion Gate section,<sup>2</sup> and that from the dromos of Tomb 505. In particular the fine mugs with stippled pattern (Pl. XIV. *h*, *i*) must be placed at the very beginning of the period. As one of these pieces joins another (Pl. XIV. *i*) found in the corresponding stratum below the megaron it is obvious that all this pottery and the fragments of fresco found with it formed part of one homogeneous deposit laid down at the beginning of the L.H. III. period when the Ramp House was built.

From this to the rock (40.00-39.81) all the pottery found was M.H., except for about half-a-dozen L.H. I. sherds.

From their position in these strata it is clear then that this L.H. I.-II. pottery and the fresco were rubbish from earlier buildings which was shot here perhaps to help make the foundation for the Ramp House. Since practically no L.H. I.-II. ware is found above the floors of the Ramp House, and some L.H. III. ware is found below, of what can be considered an early style, we can conclude that the Ramp House was built early in L.H. III., that is to say at the beginning of the fourteenth century B.C.

This conclusion is confirmed by the evidence of the pottery found in the north chamber on the west (43). Here, above the floor, all the

<sup>1</sup> For the shape cf. Furtwängler-Loeschcke, *Myk. Vasen*, Pl. XXI. 150.

<sup>2</sup> See above, pp. 20 ff.

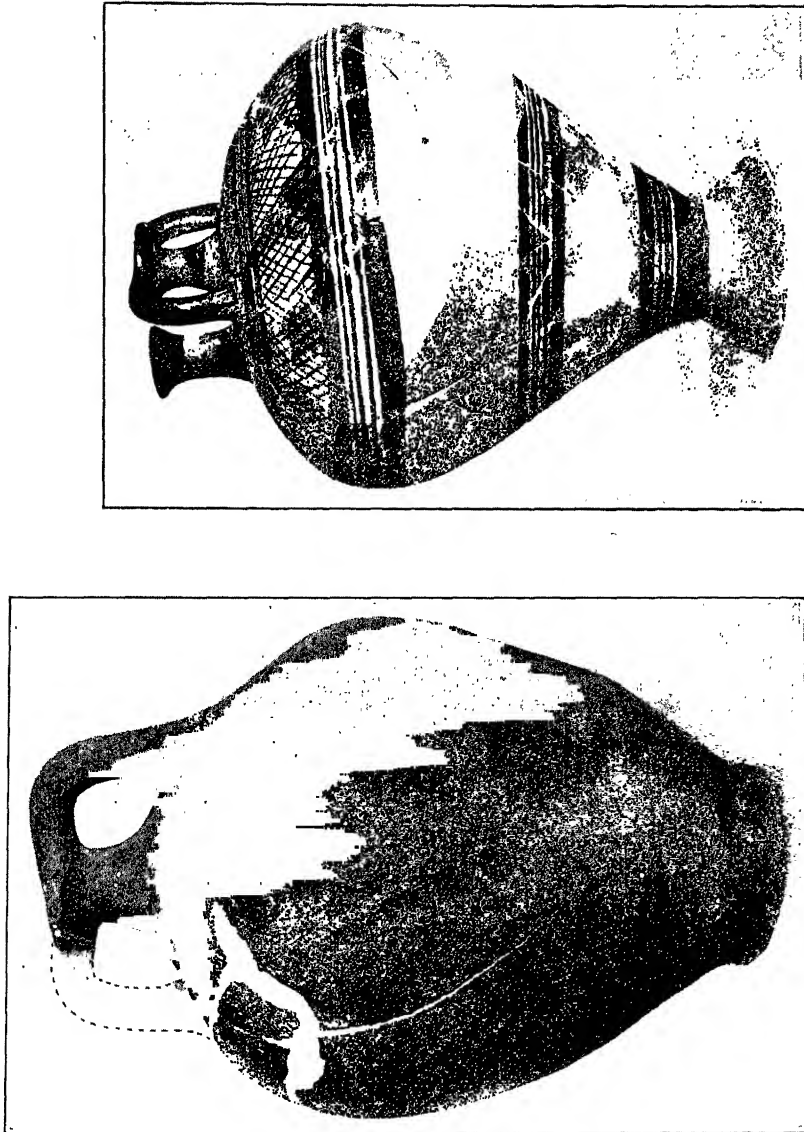


FIG. 19.—RAMP HOUSE : L.H. III STIRRUP VASES. (Scale *a*, 2 : 9; *b*, 1 : 3.)

pottery found was L.H. III. Below the floor there were fifty-seven L.H. III. sherds against eighteen pieces of earlier fabrics.

These can be classified thus :—

Middle Helladic, Minyan ware, three sherds.

Matt-painted, Group B. I., three pieces.

Late Helladic I., cup with ripple design, one sherd.

Late Helladic II., three pieces, including part of a fine jug of metallic shape like the well-known example from Korakou,<sup>1</sup> and two sherds with the thrush-egg or stippled pattern.

Ephyraean ware, one piece.

Red and black glazed ware, five sherds.

Late Helladic III., Kylikes, four pieces including part of an octopus pattern with added white, Pl. XIV. *c*, and twenty-one plain sherds.

Stirrup-vases, one good example, almost complete, of a tall slender form and good early L.H. III. fabric (Fig. 19, *b*, height .27 m.).

Alabastron, one.

Miscellaneous painted sherds, thirty.

The early character of this pottery confirms the results just arrived at by our study of the strata below the megaron and in the corridor.

Similar stratification was found immediately outside the north wall, although here it had been much disturbed by the previous excavations. Still, enough was found to shew that the stratum of L.H.I.-II. pottery with the fresco fragments had existed here above M.H. and E.H. layers.

The different kinds of pottery found here were :

Early Helladic, twenty-three sherds including thirteen pieces of one or more 'baking dishes,' like those found at Korakou.<sup>2</sup>

Middle Helladic, Minyan ware, thirty-nine sherds.

Plain polished, twenty-two pieces.

Matt-painted, Group B. I., seventeen.

Group B. II., eighteen sherds including part of a panelled cup<sup>3</sup> and four sherds of the Argive style.<sup>4</sup>

Group B. III., nine sherds.

Group D. I., light-on-dark, one sherd.

Late Helladic I., nine sherds.

<sup>1</sup> Blegen, *Korakou*, Pl. V.

<sup>2</sup> *Ibid.*, p. 13, Fig. 15.

<sup>3</sup> For the shape cf. Furtwängler-Loeschke, *Myk. Vasen*, Pl. XXIV., 176, 177, and *Phylakopi*, Pls. XVI., XVII., see also Blegen, *Korakou*, p. 24, Fig. 34 and below, p. 227, Fig. 43 *b*.

<sup>4</sup> See *B.C.H.* 1906, p. 28, Figs. 47-49; Blegen, *Korakou*, p. 28, Fig. 38.

Late Helladic II., several pieces of a vase of the Palace Style similar to one from the first Tholos at Kakovatos <sup>1</sup> and twenty-six other pieces.

Ephyraean ware, three sherds.

Yellow Minyan, fourteen sherds.

Red and black glazed, fourteen pieces.

Handleless cups,<sup>2</sup> ten.

Late Helladic III., fifty to sixty pieces of all the ordinary shapes and mostly of good early style. A characteristic sample is the teacup with a spiral pattern (Pl. XIV. f) which is the L.H. III. version of the L.H. I.-II. spirals as seen in the cup from the Palace<sup>3</sup> and the cups from Tombs 518 and 529. There was also a quantity of plain ware which was about twice as common as painted ware and includes many fragments of kylikes. There were six pieces of the usual Mycenaean terracotta female figurines.

A study of this pottery indicates that stratification similar to that in and below the Ramp House existed right up to the Grave Circle on the south and possibly even extended over the eastern part of the area now enclosed in the Grave Circle before the latter was constructed.

It is possible that the deposit found at the foot of the Little Ramp and described above may also be part of the same stratification, but there, although a few fragments of fresco were found and some L.H. I.-II. ware, most of the pottery was L.H. III.

The history of the site of the Ramp House then appears to be this. There was some occupation of this area in the E.H. age. In M.H. times occupation was much more intense, but the site seems on the whole to have been part of a cemetery. This, however, would not prevent houses being erected there, as we know from the evidence of Orchomenos,<sup>4</sup> Gonia<sup>5</sup> and other sites that the M.H. people often buried their dead among their habitations.<sup>6</sup> In the first two phases of L.H. (L.H. I.-II.) some small building was erected in the central part of the site. Finally, in L.H. III., when the walls of the citadel were built and the Grave Circle was enclosed, a large house was constructed there. Rubbish—broken pottery, fresco fragments, etc.—was thrown down the hillside, presumably to provide a level space for it. As far as we can tell, the whole area within the walls

<sup>1</sup> *Ath. Mitt.* 1909, Pl. XVIII. 2.

<sup>2</sup> See below, pp. 150, 151.

<sup>3</sup> See below, p. 158, Pl. XXIII a. Tea cups of this type are among the earlier L.H. III. Vases, cf. those from Cyprus in the British Museum (*B.M. Vases* 1 (2), c. 639-c. 641).

<sup>4</sup> Bulle, *Orchomenos*, i, pp. 61 ff.

<sup>5</sup> *A.J.A.* 1920, p. 6.

<sup>6</sup> Fimmen, *Kretisch-Mykenische Kultur*, p. 54.

of the citadel was being replanned and rebuilt at this time (early fourteenth century B.C.). So the rubbish would have come from the clearing away of earlier buildings on the slopes of the hill above to the east.

There is no need to assume that this débris came from the earlier palace. The distance is too great and there must have been other big houses of the L.H. I.-II. period on the acropolis besides the palace of the kings who were buried in the Shaft Graves. As it seems highly possible that this deposit extended further south beyond the limits of the Ramp House, careful exploration of the still unexcavated area between the Ramp House and Tsountas' House should throw light on this question. The Ramp House itself was built early in L.H. III., for the L.H. III. pottery found in the third stratum from the top in the narrow corridor is all of an early type. Later, however, as shewn by the two floors in the megaron and the thickening of the north and west walls, the house was partially at least reconstructed. This took place in L.H. III. to judge by the pottery between the two floors of the megaron, but what form the reconstruction took we can no longer say, though careful examination at the time of the earlier excavations would undoubtedly have given us much fuller information on this as on other dark points.

##### 5. THE HOUSE OF THE WARRIOR VASE.

To the west of the Ramp House and at a lower level alongside the acropolis wall lie the foundations of a large house (Pl. XIII. *a*, *c*) excavated by Schliemann, who has described them in his book. It has been christened the House of the Warrior Vase, because in one of its rooms Schliemann<sup>1</sup> found that famous krater. It is later in date than the Grave Circle and the South House, for its north-west angle projects so as to occupy as much as possible of the space left between the Grave Circle and the acropolis wall. Again at its south end the west wall of the House of the Warrior Vase abuts on to the north-west angle of the South House, which is constructed in such a way as to show that, when it was built, no extension of it to the north was contemplated. It has been suggested that the House of the Warrior Vase is earlier than the acropolis wall, and was cut through by it, particularly at the north-west angle. This is due to a misapprehension as to the date of the short wall between

<sup>1</sup> *Mycenae*, p. 132.

the north-west angle and the acropolis wall. This is built of worked poros blocks and is very similar to the Hellenistic wall that runs over the South House to the acropolis wall. This short piece of wall in question is probably also Hellenistic as it is only 2.00 m. high, and is not carried down to the rock like the walls of the House of the Warrior Vase, but rests on a mass of accumulated débris.<sup>1</sup> Further, the curious set-back at the north-west angle of the Warrior Vase House was made to avoid a well (53) at this point, and proves clearly that the house never extended any further westwards.

#### WELL SHAFTS.

The well is over 11 m. deep and is a square cut through the soft rock. The shaft is 1.35 m. wide at the bottom, and about 1.50 m. wide at the top. Above the rock the shaft is covered by a well-head of rubble masonry about 1.60 m. high and .60 m. in diameter at its mouth. When found the shaft of the well was quite empty except for some mud at the bottom, and we found no vase fragments or anything else in it. The round top was covered with two slabs which had prevented the shaft filling up with rubbish. This well must therefore be older than the Warrior Vase House, as also must be the other well-shaft which lies below the east wall of the house (46). This is cut out in the soft rock to a depth of 5 m. and is a rectangular shaft measuring .03 by 1.35 m. It may not necessarily have been a well, though it is hard to see what other purpose it could have served, as there are hand- and foot-holds .35 m. apart cut in one side to make descent and ascent easy. At the bottom on the east side there is a kind of cave about 1.80 m. high, but it is not clear whether this is artificial or due to the collapse of the side of the shaft. In any case, as the east wall of the house is built across the top of this shaft, the latest possible date for the latter is the beginning of L.H. III.

It is clear, from the level at which it stands when compared with the South House, that the part now visible of the House of the Warrior Vase was in reality only the basement. The threshold at the south-east angle (47) against the South House shews that the main entrance to the House of the Warrior Vase was at this level. What we now see are the foundations of the main floor of the house which were used as basements when the level of the ground allowed. The thresholds at a lower level (50, 51)

<sup>1</sup> Among which was found the deep bowl of L.H. III. style shown in Pl. V. a.



prove that the northern part of the foundations were so used, though even here apparently the north-eastern angle (52) had no entrance, and was probably therefore not even used as a basement but merely as foundation. Further, it does not seem that all the southern part of the house was immediately accessible as a basement,<sup>1</sup> though some parts may have been used as cellars and approached by ladders from the floor above. Schliemann in his notebook says that he found the walls, or some of them at any rate, covered with clay plaster well mixed with straw in the usual Mycenaean style like the walls of the Granary. Under date of September 20th, 1876, he records, 'The Cyclopean walls still retain part of their coating of mud.' The principal objects found by him in the house are recorded in his *Mycenae*,<sup>2</sup> except for two interesting finds, that of the fragment of a pithos with 'burned olives found in 5 m. depth.' For burned we should now read carbonised. In another chamber he found 'besides a vase handle running out in crocodile's head, an immense bronzen tripod, but little damaged, and a bronzen casserole of much smaller size, besides lots of beautiful potsherds. I have dug out this chamber about 3 m. deep, and as there is neither a door nor a window. . . .' These<sup>3</sup> and the other finds made by Schliemann shew that the basements were used, but the *piano nobile*, if we may so call it, of the house probably stood on a level with the existing rooms of the South House, the foundations of which are also carried down to the rock. Somewhat similar basements were found by Tsountas in the house to the south known as Tsountas' House,<sup>4</sup> and, as already noted, in the Granary.<sup>5</sup>

To judge by the form of the foundations of the southern portion of the House of the Warrior Vase it seems possible that the main room (48, 49) on the first floor stood here and was of the megaron type fronting westwards. At all events the plan shews us the foundations of a large room (48) with an anta porch (49) before it. If so, it is curious that it fronts in the opposite direction from the South House, and directly on to the acropolis wall.

## 6. THE SOUTH HOUSE.

Immediately to the south of the House of the Warrior Vase lies an important Mycenaean house now known as the South House (54-58).

<sup>1</sup> Cf. Tsountas-Manatt, *Mycenaean Age*, p. 68.

<sup>2</sup> Pp. 130 ff.

<sup>3</sup> Notebook, Oct. 3rd, Nov. 8th, 1876.

<sup>4</sup> *Πρακτικά*, 1886, p. 76.

<sup>5</sup> See above, pp. 45 ff.

In 1876 Schliemann just cleared the north wall, and in 1920 we continued the excavation and cleared the large North Hall (55) and three rooms adjoining it on the south (56-58) (Pl. XIII. *b, c*). Unfortunately, the decision to abandon the work at Mycenae has prevented the complete excavation of the house, and the following account of it must be taken as liable to modification when the remaining portion is cleared.

#### THE ENTRANCE.

The entrance seems to have been from the east through a shallow porch (54). This was floored with cement and was probably open to the weather, since there is a hole in the floor leading directly into the drain which, coming down the hill to the south-east, runs away under the North Hall. The entrance to the porch is marked by a large anta block of dressed conglomerate on each side. In each block there are four holes drilled to hold the wooden uprights required to bind the rubble masonry of the antae.<sup>1</sup> Between the porch and the North Hall is a much ruined foundation which would have supported the threshold. The form and width of the actual door cannot now be ascertained, but the dressed conglomerate block that now lies in the foundation and was found close by may have been part of the threshold.

#### THE NORTH HALL.

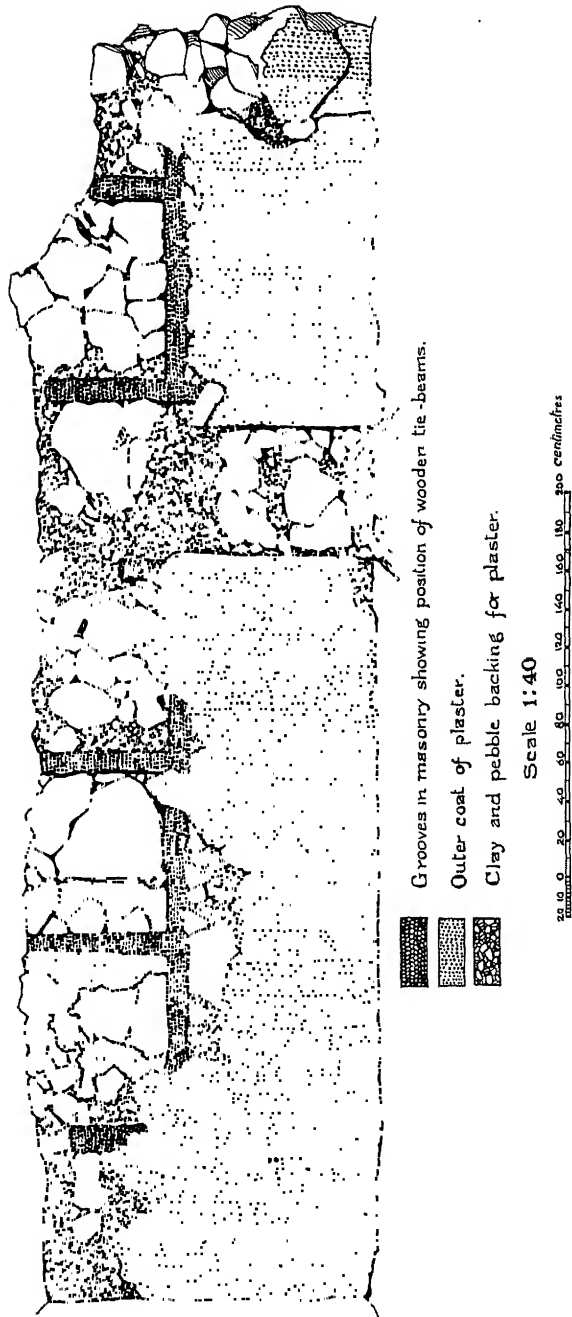
The North Hall (55) is a large and well-built room 8.30 long by 5 m. wide. The construction of the north-west angle with solid foundations going down to the rock is specially remarkable, and in this as in the other rooms, the lower part of the walls, that is to say the actual foundations, are thicker than the walls of the rooms (as in the Granary), the upper part being .60-.65 m. thick, the lower about 1 m., projecting that is some .20 m. on each face. This extra thickness stops at the level of the ground floor rooms. The walls of the rooms still stand to a height of slightly over 1.50 m. above the floor levels. This uniformity even in the ruins should point to some peculiarity of construction. Examination of the standing walls reveals that the lower part of the wall only was of rubble masonry, while all the superstructure was of crude brick. Further, in this rubble lower part a wooden framework was inserted which, bedded

<sup>1</sup> Cf. Schliemann, *Tiryns*, pp. 211, 212.

firmly in the masonry, extended upwards through the superstructure and served to bond the crude brick together. This method of building is best observed on the north side of the Central (56) and West Rooms (57) (Pl. XIII. *d*, Fig. 20). At a height of about .80 m. above the floor level a horizontal timber was let into the rubble masonry, and from this rose at intervals of .80–.85 m. vertical timbers which naturally extended upwards into the superstructure. A framework of this type was let into each face of a wall and cross-ties were set regularly through the thickness of the wall to tie the vertical timbers on each side together, and so make a solid framework to hold up the crude brick. After the insertion of the timber framework the whole wall was covered with a thickish coat of mud-plaster well mixed with chaff.

#### THE CENTRAL AND WEST ROOMS.

In the south-east corner of the North Hall a doorway leads into the Central Room, 3.80 m.  $\times$  3.40 m. (56), and from this another door enters the West Room, 3.80 m.  $\times$  3.50 m. (57). Both these two rooms are, when put together, about the same size as the North Hall itself. The construction of the walls with timber framework and mud-plastering is the same, and Pl. XIII. *d*, and Fig. 20 illustrate the north walls of these two rooms. In the doorway from the North Hall into the Central Room the mud-plaster is well preserved on the inside north-western and north-eastern jambs, but in the actual doorway itself comes to an abrupt end with a vertical straight line, and on the inner side of the door it recommences again with a vertical straight line. The same phenomenon is also to be observed in the doorway between the Central and West Rooms (Pl. XIII. *d*, Fig. 20). This abrupt and deliberate break in the mud-plaster can only be the result of the insertion of wooden door-frames which have of course perished. Further, as no thresholds were ever found in the doorways it seems clear that these also must have been of wood. Such would make a good illustration of the Homeric *δρῦνιός οὐδός*. On the top of the short partition wall between the Central and West Rooms a small cist grave of five slabs (.23 m. high, .52 m. long and .30 m. wide), with a pebble-strewn floor, was found. The only contents were the much-decayed bones of a small child. Seeing that this grave was sunk into the upper part of the débris of the ruined South House it would probably belong to the period succeeding the destruction of the



city, that is to say, the early Iron Age or period of Geometric pottery. At the east end of the south wall of the Central Room a doorway leads into yet another chamber, but this still awaits excavation.

#### THE EAST ROOM.

On the left of the entrance to the porch of the South House lies yet another room, the East Room (4.10 m.  $\times$  3.20 m.) (58). A short thick wall (1.40 m. in its upper part) separates this from the porch, and the East Room itself is a small chamber similar to the Central and West Rooms. Here again, at the east end of the south wall, is a doorway leading through into yet another room, so perhaps the East Room was a lobby rather than an independent chamber. The construction of the walls is the same as in the other three rooms, and on the south wall the traces of the timber framework and mud-plaster are very well preserved. The floor of the East Room as of all the other rooms consists of a thin layer of white clay spread over hard-trodden earth. Naturally the floor is not very level.

#### *Roof Construction.*

The four rooms just briefly described formed the ground floor of the house, for there were plentiful traces that an upper storey had existed. Many pieces of cement flooring were found, especially in the Central and West Rooms. These shew the usual Mycenaean construction. Horizontal roof beams were first laid across from wall to wall fairly close to one another. On them was placed a layer of reeds, brushwood or small branches of trees with their leaves; to judge by the leaf impressions preserved on some fragments oleanders were among those employed. On the top of the branches a thick layer of clay earth was laid down and trodden hard. Finally, over this came a coating of the usual Mycenaean floor cement which would serve either as the floor of the rooms of the first upper storey or else as a flat terrace roof. Also in the Central and West Rooms were found many small blocks of a soft grey sandstone of very light weight. Most of these blocks shew traces of a stucco coating, and since exactly the same kind of stone is used for the treads in the Great Staircase in the Palace,<sup>1</sup> where each tread is composed of several blocks of this sandstone fitted together and coated with stucco, we may conclude

<sup>1</sup> See below, pp. 159 ff.

that these pieces formed part of a staircase leading to the upper floor of the South House. A well-dressed (sawn and polished) block of green stone with white markings that resemble fossils was found with them in the Central Room. It is .18 m. thick, 1.29 m. long, and varies in width from .23 m. to .25 m. The purpose of this stone cannot now be ascertained, but it clearly formed part of some construction in the upper storey, and may perhaps have formed a threshold at the top of the staircase. A further indication of the existence of an upper storey was provided by the West Room. In the fallen débris here we found a considerable number of fragments of pithoi and of store-vessels of unbaked clay (*kotselles*) similar to those found in the Granary,<sup>1</sup> and also a small shallow bowl or mortar of grey volcanic (Melian?) stone on three legs (diam. .25 m., height .125 m., legs .09 m. wide).

*Find's in the South House.*

In the rooms of the South House no pottery or any other objects was found which can be definitely regarded as having belonged to or having been in use in the house at the time of its destruction. In the North Hall (55) very little pottery was found, and except part of a Hellenistic bowl and a fragment of unpainted greenish-grey M.H. ware, both of which are obviously strays, all was of L.H. III. date and style. Among the shapes recognisable are stirrup-jars, mugs, deep bowls, kylikes, jugs of a hydria type and kraters, all the characteristic L.H. III. shapes. One fragment of a krater shews the legs of a bird rendered in a good manner, and cannot be later in date than the middle of L.H. III. Another fragment with the thrush-egg or stippled decoration may even be somewhat earlier. There were also six fragmentary specimens of the ordinary Mycenaean terracotta female figurines and one animal figurine (a cow?).

In the Central Room (56), apart from three or four probable pieces of L.H. I. and two stray sherds of M.H. Matt-painted ware, all the pottery was L.H. III. Among the shapes represented there are kylikes, stirrup-vases, deep bowls including the fine early specimen seen in Pl. V. c, hydria-shaped jugs and pyxides. There are two sherds with the stippled or thrush-egg pattern, and an interesting piece from a large amphora (unfortunately much damaged by fire) with a good argonaut pattern. These fragments fall at the beginning of L.H. III. There were also two heads of ordinary Mycenaean female figurines in terracotta, and one of an animal.

In the West Room (57) the pottery again was L.H. III., and the shapes include kylikes, with one example of the Zygouries type,<sup>2</sup> stirrup-vases, deep bowls, kraters and one fragment of a rhyton. There are also several pieces of drain tiles<sup>3</sup> shaped like an inverted Π. There were six fragments of terracotta

<sup>1</sup> See above, pp. 48 ff.

<sup>2</sup> See pp. 29, 52, 108.

<sup>3</sup> See below, p. 187.

female figurines of the usual Mycenaean type. Towards the south the greater part of the floor of the room was covered with a thin layer of lead. On close examination this appeared to be the remains of two or more leaden vessels which had stood towards the south-west and north-west corners of the room. These had melted in the conflagration which destroyed the house, and the molten metal had run all over the floor.

In the East Room (58) little pottery was found and apart from two L.H. I.-II. pieces all was L.H. III. The shapes represented are kylikes, stirrup-vases, deep bowls (including a good example of the 'Close Style,' of which a restored drawing is given in Fig. 25, c), and mugs, all of the usual L.H. III. types. Among the coarse ware was a piece of a vase half-pierced through, sieve fashion, with a number of small holes. Odds and ends comprise a thick clay disc (.12 m. diameter and .075 m. high) pierced through the centre, portions of two female figurines and two fragmentary oxen of terracotta.

Although it must be remembered that as no whole vases were found in the four rooms so far cleared, none of the pottery can be proved to have belonged to the equipment of the house, yet the almost complete absence of any pottery earlier or later than early L.H. III. gives us a good clue to its date. The L.H. III. pottery from these rooms, though fragmentary, is of good style and quality. The paint is good and the patterns are on the whole well-drawn. Generally speaking, the pottery resembles that from the dromos of Tomb 505, and from the lowest levels of the Lion Gate section.<sup>1</sup> Marine designs are common and the octopus, argonaut and murex all occur.

#### STRATIFICATION BELOW THE EAST ROOM.

Tests were sunk below the floor levels of all four rooms, but only in the case of the East Room was the test carried down to the rock, as the ruinous condition of the walls of the rooms made it undesirable to risk the collapse of the house. Below the clay floor of the East Room the following stratification was found. Directly below the floor was a layer of earth about 1 m. thick. About two-thirds of the pottery found in this level was L.H. III., and included kylikes, deep bowls and stirrup-jars, mostly of good style and quality. One fragment shews part of a design of figure-of-eight shields. About one-third of the pottery is M.H. Matt-painted ware, and there is one piece of M.H. ware with decoration in white. Finally, there are two or three Minyan sherds and one E.H. piece.

<sup>1</sup> See above, pp. 20 ff.

In the next stratum from 1.00 m. to 1.50 m. below the floor, little was found, as at this depth we had to dig through a layer of loose stone fill. There were twenty sherds of M.H. Matt-painted ware, Groups B. I. and II., nine Minyan sherds, one E.H. sherd and thirteen L.H. III. pieces which resemble in style those from the preceding layer.

In the next level from 1.50 to 2.40 m. below the floor the stone-fill gave way to earth filled with the débris of the M.H. and E.H. periods. The Matt-painted M.H. pottery, Group B. I., predominates and is ornamented with the usual rude geometric patterns characteristic of this ware. There was a good deal of Grey Minyan ware, and one or two sherds of the black polished so-called Argive-Minyan variety. There was one fragment of polychrome Matt-painted ware, Group B. III. Finally, mixed with the M.H. ware, about twenty E.H. sherds were found. These were mostly covered with reddish to red-brown glaze paint. There is one piece of light-on-dark E.H. ware; and one profiled rim and two flat bases such as occur in the earlier strata at Korakou.<sup>1</sup>

In the lowest level between 2.40 and 3.00 m. below the floor, when the native rock was reached, we dug through nothing but natural deposit. Here E.H. pottery was predominant, and the great majority of the sherds were covered with red glaze paint inside and out. A few pieces were covered with blackish glaze paint. Among these two varieties, flat bases were not uncommon, and there were several rims of the typical E.H. bowls.<sup>2</sup> One piece shows a pattern of oblique pale red lines on a red polished ground: sherds of similar E.H. ware were found in the E.H. stratum at the north foot of the Great Ramp (see p. 64, Pl. XII. 2), and elsewhere north of the Grave Circle.<sup>3</sup> There is one piece of light-on-dark E.H. ware, and a peculiar fragment of fine grey-black ware with a very smooth surface decorated with a small raised knob somewhat like the black monochrome ware<sup>4</sup> of Orchomenos I., which is held to be neolithic like similar ware found at Corinth. A certain amount of M.H. Matt-painted ware was also found right down to the rock. This was mainly of Group B. I., but two sherds of smooth rather fine ware of pinkish-buff colour may indicate the transition between Early and Middle Helladic. There were also three sherds of ordinary Grey Minyan ware, and one incised piece of the black polished Argive-Minyan ware.

<sup>1</sup> Blegen, *Korakou*, pp. 4 ff.

<sup>2</sup> Cf. Blegen, *Korakou*, p. 12, Fig. 13.

<sup>3</sup> See below, pp. 109 ff.

<sup>4</sup> Wace-Thompson, *Prehist. Thessaly*, p. 194.



## MIDDLE HELLADIC GRAVE.

As the earth seemed to be undisturbed, the presence of M.H. ware on the rock was at first surprising. But examination of the sides of the pit revealed on the west a M.H. grave. This was a shallow cutting about .85 m. wide and .60 m. long, and not more than .20 m. deep, cut slightly into the surface of the rock. It contained one skeleton, that of an adult, laid in the usual contracted position on its right side with

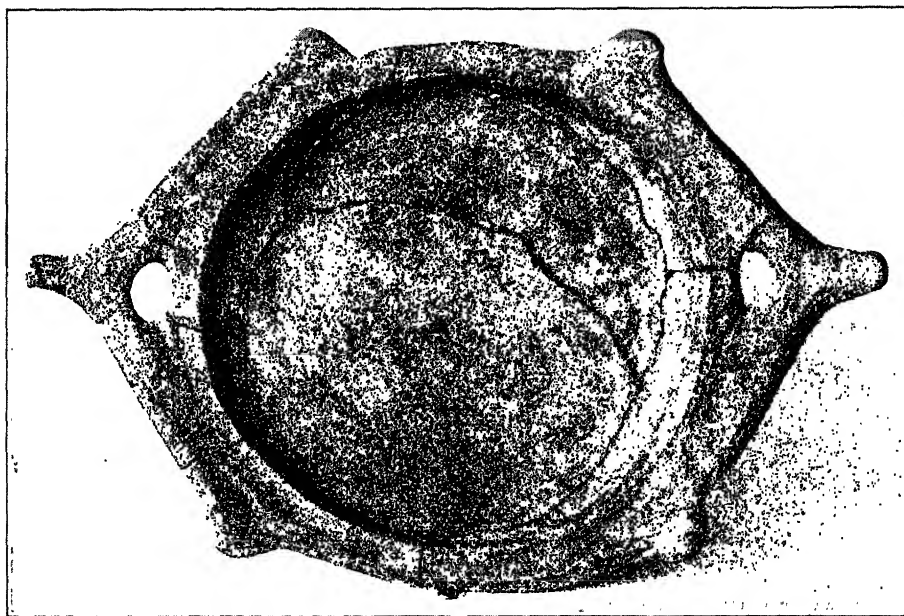


FIG. 21.—SOUTH HOUSE: MIDDLE HELLADIC DISH FROM M.H. GRAVE BELOW EAST ROOM (Scale 1 : 4).

the head towards the north. In front of the skeleton (*i.e.* on its west side) lay a M.H. dish (Fig. 21). This though broken is complete and measures .42 long, .27 wide, .23 inner diameter, and is .055 m. high. It is of rather coarse fabric, covered with red-buff slip, and well polished. The fabric and polishing are characteristic of the plain polished M.H. ware, as is also the wishbone type of handle.

This grave explains at once the intrusion of M.H. ware into the E.H. strata. The M.H. sherds must have percolated in when the grave was dug. That no pottery later than M.H. then intruded proves that the grave was dug in M.H. times, quite apart from the evidence of the

dish found there. This grave and those found by us below the Ramp House,<sup>1</sup> and those found by Schliemann and Stamatakes in the Grave Circle<sup>2</sup> formed part of the same M.H. cemetery which extended at least as far south as this point, and may well have spread still further south and west.

#### DATE OF THE SOUTH HOUSE.

The tests below the floors of the other rooms yielded similar results everywhere. At a depth of about 1 m. fill of rough stones was met with. In the North Hall the earth between the stone-fill and the floor produced very little. Apart from one stray sherd of the Argive Minyan ware, all was L.H. III., and mostly of good style and quality. One sherd is ornamented with added white dots.

In the West Room, at a depth of 1 m., stone-fill was met with. In the layer of earth above this there were three stray sherds of M.H. ware (one Yellow Minyan and two Matt-painted Group B. I.), and all the rest of the pottery was L.H. III. Although there was not much pottery, yet the style and quality of the L.H. III. ware were good and the usual characteristic shapes were represented.

The layer of stone-fill was obviously thrown in at the time the house was built, and the foundation walls were sunk into the M.H. and other early strata. Over the fill was laid a covering of earth 1 m. thick, to form a good backing for the actual floor of yellow clay. Thus the pottery found just below the floors forms a good criterion for dating the house, especially as the L.H. III. pottery found between the floor and the layer of stone-fill is of uniformly good quality and style, and generally speaking closely resembles the pottery from the dromos of Tomb 505 and the earlier strata in the Lion Gate sector, which may be taken as far as we can tell at present as a good representative collection of early L.H. III. ware. Since the L.H. III. pottery found above the floors also resembles in many respects the pottery from Tomb 505, we can date the building of the South House to the early part of L.H. III. It would then be approximately contemporary with the Lion Gate and the other buildings constructed just after 1400 B.C. This date suits quite well with the style of construction for the foundation walls, especially the north-west angle of the North Hall are very well built.

<sup>1</sup> See above, p. 76.

<sup>2</sup> See below, pp. 118 ff.

In a vain attempt to find the continuation of the drain that runs under the North Hall of the South House we dug a shaft between the west wall of the North Hall and the acropolis wall. Here we found a great quantity of Mycenaean pottery, but all, except one piece of a L.H. II. alabastron, was L.H. III. in date and a large proportion of it was of the same good style as the pottery from the dromos of Tomb 505 and the earlier strata of the Lion Gate section, and should therefore fall early in the L.H. III. period. All the usual shapes are represented, especially deep bowls, kylikes, stirrup-jars (including parts of a large one with an octopus design), jugs of an amphora type, pyxides, and stemmed goblets or kraters. There were some pieces of large jugs and deep bowls of the Granary Class, and the presence of these together with the ordinary L.H. III. vases, some of which have murex patterns, shews that this deposit also contains quite late elements. It was therefore probably accumulating during the L.H. III. period in the open passage that ran between the South House and the inside face of the acropolis wall. Miscellaneous finds here include an oblong block of steatite ( $\cdot 11$  m. by  $\cdot 068$  by  $\cdot 024$  m.), part of a terracotta ox, a broken chair in the same material, and the upper part of a large terracotta female figurine of rather unusual style, though clearly of L.H. III. date.

## HELLENISTIC BUILDINGS.

### FIRST PERIOD.

Above the ruins of the South House lay the remains of Hellenistic buildings which seem to have been reconstructed at least twice.

The earliest walls (see Fig. 22), especially the piece which adjoins the acropolis wall, resembled the northernmost of the short walls between the west side of the Grave Circle and the acropolis wall and the wall that extends from the north-west corner of the House of the Warrior Vase to the acropolis wall (at 53). All these three contain many squared poros blocks or fragments of such which may quite well have been taken from the ruins of earlier Hellenic constructions destroyed by the Argives when they took Mycenae about 468 B.C. In relation to the South House these walls lay almost immediately on the top of the pile of débris formed by its burning and collapse. There was practically no intervening stratum, but round the base of the Hellenistic walls a fair amount of Geometric and a little Orientalising pottery were found, which will be described below. No plan could be made out and no connection could be established between the western walls and the small room to the east. In the small eastern room were found a large number of carbonized olive-

kernels, and directly below them, and in some cases with them, the first fragments of the Mycenaean cement flooring from the upper storey of the South House came to light. Hellenistic pottery, however, was found at this level, and the olive-kernels are probably to be regarded as the remains of a store of olives kept in this room.

## SECOND PERIOD.

In the second period of these Hellenistic buildings in some alterations, which from the slight difference in level took place not so very long

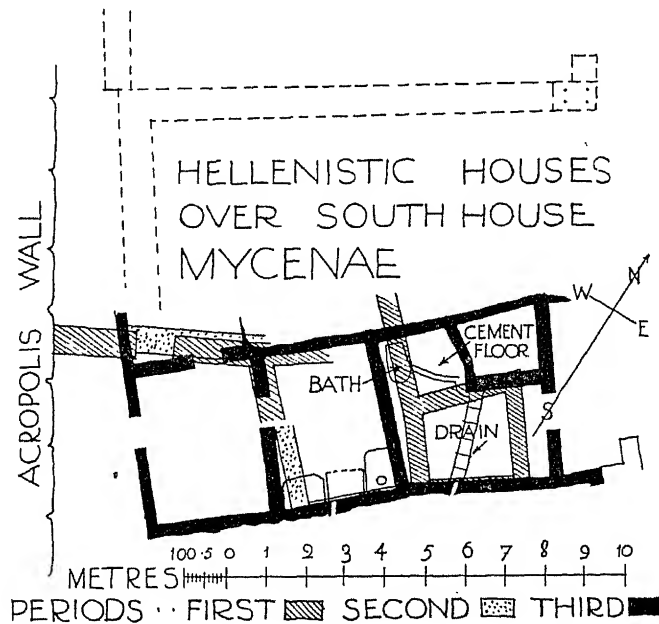


FIG. 22.

afterwards, the doorway in the north wall was blocked up, and the east wall extended southwards while the east room was left alone.

## THIRD PERIOD.

Later still, and at a higher level, the whole building was reconstructed, and this, to judge by the similarity of style, and the re-use of older materials, took place about the same time as the alterations in the four chambers to the east of the Little Ramp; which, since the Hellenistic inscription dating from about 195 B.C. was then used as a

pavement slab, can hardly have been earlier than the latter part of the second century B.C. In this later Hellenistic house the plan was much clearer, although the northern part of the building had been removed during Schliemann's excavations, and the southern portion of it is still unexcavated. The building as cleared consists of one small and three larger rooms. The western room had apparently three entrances from the west, north and east. Through the last one passes into the central room which had no other door.

#### THE BATHROOMS.

In this were three basins arranged along the south wall. The floors of all these three basins were made of cement laid on a cobble foundation, and the sides were of broken tiles overlaid with cement. The three stood at different levels. The eastern basin which measured .35 by .90 m., and had a circular sinking at its south end, had a round bowl .15 m. in diameter set in its floor at the south end. The bottom of this bowl was missing and it may have served as a drain, but no drain pipe or similar outlet was found below communicating with it. The basin itself was only just raised above the level of the floor of the room. The central basin was very much destroyed, and though its length (1.10 m. approximately) could be ascertained, it was impossible to determine its width owing to the destruction of the inner edge. Consequently, it was not easy to fix the level of the floor of this basin, but taking into consideration the drain which ran from it through the south wall of the room, it seems that its floor was at a level about midway between the floors of the eastern and western basins. The drain is formed by a terracotta runlet about .10 m. wide, and slightly less in height, and shaped like a U. The western basin was the most complete and measured .80 m. by .60 m., and stood about .30 m. above the level of the floor. In front of this and of the central basin a considerable amount of charcoal was found, which indicates that water was heated before being poured into the basins.

There is no direct entrance from the central room into the eastern room. The dividing wall between them shewed no break. The door to the eastern room was in its west wall along the outside of which there seemed to run a street. The north-east corner of the room was walled off by an irregularly built wall through which there was no passage.

It is hard to see how the small chamber or closet thus created could have been entered or what its purpose was. The north-western portion of the room was covered with a cement floor, which did not extend further south than the southern wall of the closet just mentioned, as shewn on the plan (Fig. 22). On this cement floor, in the north-west angle of the room, a large terracotta bath<sup>1</sup> of an ordinary Hellenistic type was set, with

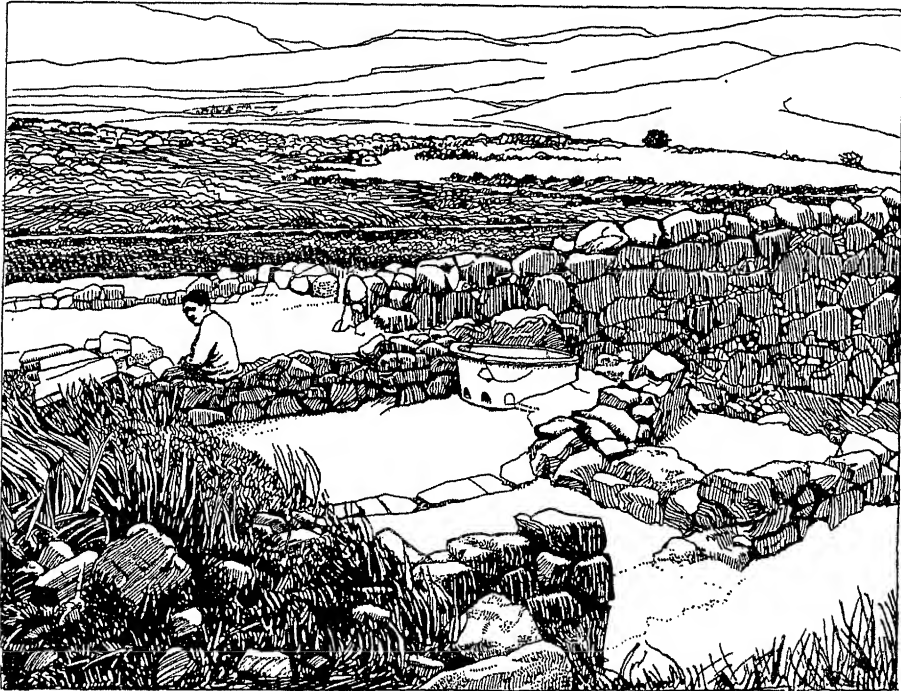


FIG. 23.—HELLENISTIC BUILDING OVER SOUTH HOUSE: BATHROOM FROM S.E.

a drain to take off the water (Figs. 22, 23). The bath, though broken, was complete and measures 1.01 m. in length (Fig. 24); at one end it is rounded and .63 m. wide, while at the other end, the foot, it is rectangular and .43 m. wide. At the foot it is .18 m. high and at the head

<sup>1</sup> The arrangement of a bath set on a cement floor which does not extend over the whole room, with a small enclosed space without any obvious entrance alongside it, is almost exactly that of a similar bath set on a cement floor with a small walled in space beside it in the third of the Hellenistic chambers (32) at the head of the Great Ramp (see p. 69). This similarity between the two rooms suggests that the curious walled in space had some connection with the bath: it may perhaps have been the base for some contrivance for heating water for the bath.

·42 m. high outside. In the floor of the bath at the foot there is a circular sinking ·30 m. wide and ·15 m. deep. The centre of this was broken and contained some lead; either this lead had been used to repair damage to the bath or else had been set round a hole intended to carry off water. At the head end of the bath there is a raised seat ·1·45 m. high and ·23 m. wide. Under the seat just above the floor of the bath

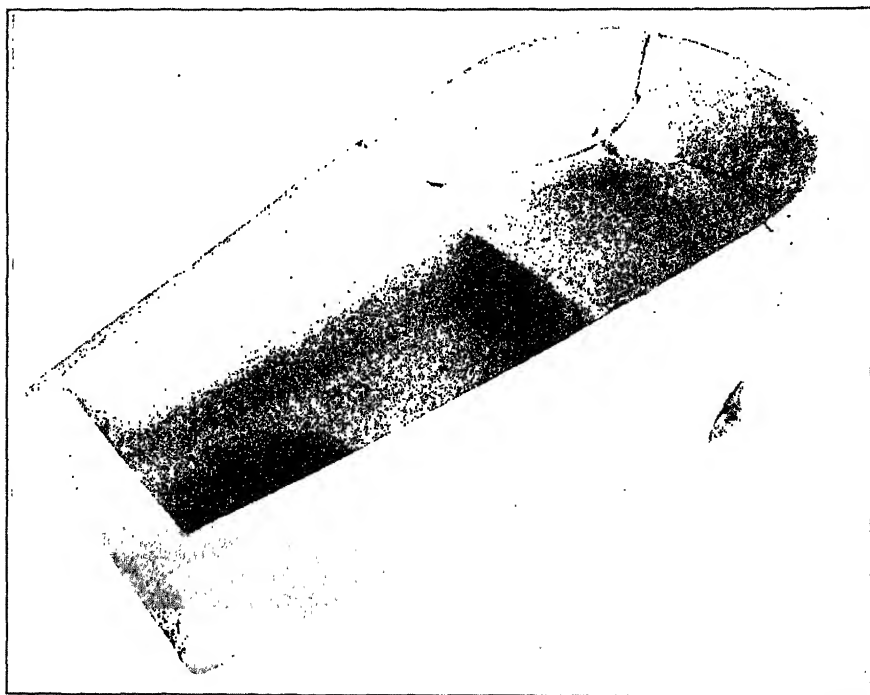


FIG. 24.—HELLENISTIC BATH FROM BUILDING OVER SOUTH HOUSE (Scale 1 : 10).

on the outside are four semicircular holes (see Figs. 23, 24), the object of which was probably to secure thorough baking during firing. The cement floor, on which the bath was set, sloped gradually upwards to the south, where it was as high as the holes at the rounded end of the bath. Along the extreme southern edge of the cement floor there ran a raised lip, which formed a kind of shallow drain not more than ·10 m. deep, running away from the side of the bath to the south-west angle of the wall enclosing the closet to the north-east. At this angle was a sort of semicircular trap leading into a drain which ran away under the

floor of the room through an opening<sup>1</sup> in the southern wall .15 m. high and .22 m. wide, and made of small poros blocks. The drain was very roughly made. The roof consisted of flat tiles (none of which are complete), laid across the top of rough walls of small stones and broken tiles about .30 m. high and .25 m. wide. Between these walls ran a U-shaped terracotta runlet about .20 m. wide and .10 m. deep, and both it and the side-walls were rudely founded on rough stone-work. By the bath were found some broken querns and one or two stone pounders. The presence of the bath in this room and of the three basins in the central room suggests that this may have formed part of a public bathing establishment, though there is nothing to disprove its having formed part of a private house. The setting of the bath and the construction of the drain resemble very closely the setting of the bath and the tile floor in the Hellenistic chambers immediately to the east of the Little Ramp.<sup>2</sup>

#### *Finds.*

In clearing the building with the bath many tiles were found, among which curved roofing tiles were common, but flat tiles very rare. Much pottery was also found, and it can be classified thus as follows:—

In the upper layer down to the floor level of the Hellenistic building with the bath and basins the bulk of the pottery found was Hellenistic. Among this were pieces of twelve Megarian bowls, one of which shews pairs of rampant goats on either side of bunches of grapes (a bowl with a similar pattern was found above the Granary, see p. 39), another shews a boy with a chlamys thrown over his left arm, and a third has a net pattern with the letters  $\begin{smallmatrix} K \\ V \end{smallmatrix}$  in relief near the base. There were a few pieces of ordinary Hellenistic ware with designs rendered with white paint and incised lines on a ground of rather inferior black glaze, and much late black glazed ware. There was also some ribbed black glazed ware, two broken specimens of so-called tear-bottles, many lamps, and a considerable quantity of plain red-buff Hellenistic domestic ware and much coarse pottery including the pointed bases of three amphorae. Other Hellenistic finds include the hollow stand of a large terracotta basin (.25 m. high), an iron key, a clay spool, and about fifteen pyramidal loom-weights of terracotta, one of which has a sort of broad-arrow mark incised on one side. There was also a large disc-shaped loom-weight of terracotta. Other pottery of earlier periods comprised two small fragments of red-figured ware and the handle of a skyphos of good black glazed ware. There were several

<sup>1</sup> This can be seen in Pl. XIII. b.

<sup>2</sup> See pp. 69 ff. above.



pieces of local Orientalising ware, about twelve fragments in all. Some of these are from small bowls or skyphoi, and have patterns of parallel lines or rays with added white and purple on black. One piece, which is possibly later, has a palmette pattern in similar style, but with details added by incised lines. The clay of this fragment is light-brown in colour, and it might be somewhat later in date than the others, but it has been noted that in some Orientalising ware from Mycenae<sup>1</sup> on the same vase some of the figures have incisions and some have none. There were five sherds of Geometric ware of the ordinary Argive style similar to that from the Argive Heraion, Tiryns and Asine<sup>2</sup>: two pieces have fish represented on them. A little L.H. III. ware was found, but of course is of no value for stratigraphical purposes, as the soil within the acropolis is so permeated with L.H. III. sherds. Two pieces are in the 'Close Style.' To these can be added part of a terracotta figurine representing a pair of horses.

In the next layer below, that is to say at the level of the room with the olive-kernels, and just above the ruins of the South House itself, the character of the pottery shews a marked difference. There was a considerable amount of Hellenistic ware, but no pieces of Megarian bowls, and only one piece of an amphora handle of the Rhodian type. There were several sherds of good black glazed ware, part of a jug with a triple handle, two sherds with floral designs in white, and incised lines on a ground of black glaze. Two black glazed sherds have an incised P and another Δ. A number of small bowls, probably also Hellenistic, covered with a thin washy black-brown paint inside and out also belong to this level, half a disc-shaped loom-weight, and three pyramidal loom-weights, one of them inscribed ΜΥΠΟΥΣ. There were a few pieces of good black glazed ware, and a large unpainted krater. Earlier wares comprise a little Orientalising pottery, and not more than a dozen Geometric pieces of the same style as those above-mentioned. With these may be grouped part of a stamped pithos shewing a belt of rosettes set in small square panels defined by raised slashed lines. The interstices round the rosettes are filled with small punched circles. This may be contemporary with the Geometric ware but is more probably of the archaic Greek period. There is also a rude terracotta head of a lion or dog, which might also be of the same date as the Geometric ware. Finally there was a quantity of L.H. III. ware including several examples of the Granary class. Among the odds and ends there was one fragment, the head of an ordinary Mycenaean terracotta female figurine.

#### THE HISTORY OF THE SITE.

It will thus be seen that an examination of the pottery confirms the views already expressed as to the dating of these Hellenistic houses. After the burning and destruction of the South House at the end of the

<sup>1</sup> In Mycenaean Magazine in Nat. Mus., Athens.

<sup>2</sup> Cf. *Tiryns*, i. pp. 135 ff.

Bronze Age nothing seems to have been built above its remains for a long time. During this period the Geometric, Orientalising and classical pottery would have accumulated on the top of the ruins together with late Mycenaean sherds washed down from the slopes of the acropolis above. Then ensued the destruction of Mycenae by the Argives about 468 B.C. Later, about the third century, the citadel seems to have been reoccupied, as shewn by Dr. Boethius,<sup>1</sup> as a *komē* of Argos; to this period, the late third and second centuries B.C., would belong the first two strata of Hellenistic walls and the earlier Hellenistic pottery such as the ribbed black glazed ware, and some of that decorated with patterns in white paint and incised lines. Then after the end of the second century B.C. was built the house with the bath, which may have lasted till the first century A.D. Soon afterwards, to judge by the other late ruins visible within the acropolis, Mycenae was again deserted, and in the time of Pausanias it seems to have been uninhabited; so the second period of Hellenistic occupation should have come to an end before the time of Hadrian. This dating would suit well the four chambers to the east of the Little Ramp which are contemporary with the building with the bath, and all the other late Hellenistic buildings excavated by Tsountas on the western and south-western slopes of the citadel.

## 7. THE GRAVE CIRCLE.

Having now completed our archaeological survey of the area immediately surrounding it we come at last to the Grave Circle itself (Pl. XV.). Although much <sup>2</sup> has been written on this subject since the excavations and researches of Schliemann,<sup>3</sup> Stamatakes and Tsountas,<sup>4</sup> the greatest advance towards a fuller understanding of its history was made by Karo, whose able paper has unfortunately not yet been published. Thanks to his unselfish courtesy we had the opportunity of conducting our researches in the Grave Circle with the assistance of the proofs of his article. Though our conclusions differ from his own (it must be remembered that we had the advantage of being able to excavate and

<sup>1</sup> See below, § XI.

<sup>2</sup> Belger, *Mykenische Lokalsage*; *Jahrbuch* 1895, pp. 114 ff.; see also the references given by Frazer in his *Pausanias*, Vol. III. pp. 103 ff.

<sup>3</sup> See his *Mycenae* and Schuchhardt, *Schliemann's Excavations*, pp. 152 ff.

<sup>4</sup> Tsountas-Manatt, *Myc. Age*, pp. 84 ff.; *Jahrbuch*, 1895, pp. 148 ff.

he had not), we owe a very great debt of gratitude to him for his generous assistance in our work.

Two observations of Schliemann, the original excavator, deserve special notice, because they record opinions formed as a direct result of examinations made during the excavations. He says,<sup>1</sup> 'It deserves particular attention that on the inner side of the supposed circle, namely, on the side towards which the parallel rows of slabs incline, the vacant space has evidently been filled up with débris to the very top of the wall immediately after its completion.' Later on, he records,<sup>2</sup> 'I now find here in the acropolis numerous fragments of hand-made pottery, but not in distinct layers as at Tiryns. It is evident that the layer of prehistoric hand-made pottery (for there must have been such a layer) has been disturbed, and I think it probable that it was disturbed when the huge wall was built which sustains the circular double parallel enclosure of the Agora in the lower part of the acropolis, because this wall is at all events later than the hand-made pottery. What I find of this pottery has usually an ornamentation of black horizontal bands or spiral lines on a light-green dead ground; but fragments of monochromatic lustrous black vases also occur.' This last sentence shews clearly that Schliemann's hand-made pottery is what we now classify as M.H. ware, and that he observed that Matt-painted ware and Minyan ware were contemporaneous. In his notebook under the date of September 23rd, 1876, he states, 'The soil in the acropolis having been again and again disturbed by the building of walls the layer of primitive pottery certainly is not in its place, and I begin to feel strong doubts that the acropolis was built in the time of the hand-made pottery. . . . But I repeat hand-made pottery was found in the acropolis and particularly in a great depth, but together with posterior potter's wheel fabricate and not making up a stratum like in Tiryns.' In connection with this last remark that he found wheel-made Mycenaean pottery deep down within the Grave Circle, Schliemann mentions at least twice that to his astonishment he found Mycenaean wheel-made pottery and 'Hera idols' (*i.e.* L.H. III. terracotta female figurines) at a low level over the Shaft Graves.<sup>3</sup> In fact, he records specially that he found L.H. III. figurines below the level of the grave

<sup>1</sup> *Mycenae*, p. 88.

<sup>2</sup> *Ibid.*, p. 137.

<sup>3</sup> *Ibid.*, pp. 154, 158, 161; contrast his account of the stratification round the Fourth Shaft Grave, *ibid.* pp. 212, 213.

stelai, which he found still standing *in situ* above the Third Shaft Grave.<sup>1</sup> These observations of Schliemann's are confirmed by the more recent work of Keramopoulos whose investigations in 1913 in the hollow under the fallen rock in the centre of the Grave Circle (65) brought to light pottery of all periods from M.H. to L.H. III.<sup>2</sup> The level at which these finds were made is far below the level at which the grave stelai stood.

#### CONSTRUCTION OF THE RING OF SLABS.

Before attempting to detail the history of the Grave Circle and the reasons for its construction it will be better to give the results of our tests in and around it. Outside the Circle on the west between the supporting wall of the ring of slabs and the inner face of the acropolis wall, we cleared the short curved wall (63) which lies at the base of the supporting wall. This short wall (see plan, Pl. I.) follows on the outside the curve of the supporting wall, to which it acts as a kind of footing. The wall is nowhere more than a metre high, and is only one stone thick although packed on the inside with small stones. Its object is not clear, but it is obviously connected with the supporting wall of the ring of slabs, and only slightly if at all older. Most probably it was built to protect and strengthen the base of the supporting wall during the construction of the latter. Just to the west of this wall the rock on which it is founded dips down abruptly with a sharp edge as though it had been intentionally cut away.<sup>3</sup> The cutting thus formed is filled with stones packed tight together up to the level of the base of the short curved wall. The stone packing runs westward under the lowest course of Cyclopean blocks of the acropolis wall for which it forms the bedding. This seems to have been the usual Mycenaean system, and tests under other parts of the acropolis wall, under the walls of the Treasury of Atreus and other tholos tombs have shewn the same. When they were

<sup>1</sup> We follow the numbering of the Shaft Graves which was instituted by Stamatakes and is observed by the National Museum at Athens and in all subsequent publications. This numbering differs from Schliemann's, thus:—

Schliemann's	Grave 1	is now 5.
,	Grave 2	is now 1.
„	Grave 3	is now 3.
„	Grave 4	is now 4.
„	Grave 5	is now 2.

The Sixth Grave was found by Stamatakes.

<sup>2</sup> 'Εφ. 'Αρχ. 1918, pp. 52 ff.

See the section A-B, Pl. XVII.

building a big wall of Cyclopean blocks they did not lay the lowest course directly on the rock. On the contrary a bedding of smaller stones packed tight together was laid on the rock and the Cyclopean blocks were placed in position on them. Probably they found that it was easier to handle and align the big blocks if they were just raised off the ground by the intervention of smaller stones.

### *Pottery.*

On and among this stone packing we found a quantity of pottery which can be classified thus :—

Early Helladic, two sherds, one shewn in Pl. XII. *h*.

Middle Helladic, fourteen sherds including Minyan ware, and Matt-painted, Group B. I.

Late Helladic II., twelve sherds.

Late Helladic III., one hundred and nine sherds, which include all the characteristic shapes, kraters, deep bowls, kylikes (mostly plain, but some with murex and floral patterns), alabastra, stirrup-vases, mugs (one piece with a stippled or thrush-egg pattern), jugs of a hydria type; one piece had added white paint. There were also three animal and eight female terracotta figurines of the usual L.H. III. types, a bronze dart-head 0.4 m. long, and one piece of painted stucco with black curving lines on a white ground from the edge of an altar or a hearth.

Near by, close to the edge of the cut rock a small pocket of sherds was found among the stones; these were :—

Middle Helladic, three pieces.

Late Helladic I., two sherds.

Late Helladic II., two pieces from the same vase; one of these is seen in Fig. 25, *a*. The birds are most gracefully drawn, and the pattern is unusual.

Late Helladic III., sixteen pieces, of which six are from kylikes.

The presence of L.H. III. pottery among the small stones on which the acropolis wall is founded shews that the latter can hardly be earlier than the beginning of that period, the early years of the fourteenth century B.C. Also the presence of L.H. III. pottery between the acropolis wall and the supporting wall of the Grave Circle, coupled with the existence of the Greek walls, shews that in Mycenaean times down to the close of L.H. III. the passage between the two walls remained open. The base of the supporting wall of the Grave Circle on the western or outer side is vertical for a short distance and then slopes inwards at an angle of

about seventy-five degrees. The vertical part (never more than a metre high) was probably intended to be covered with soil on its outside. On the other hand the upper or sloping part was probably intended to stand

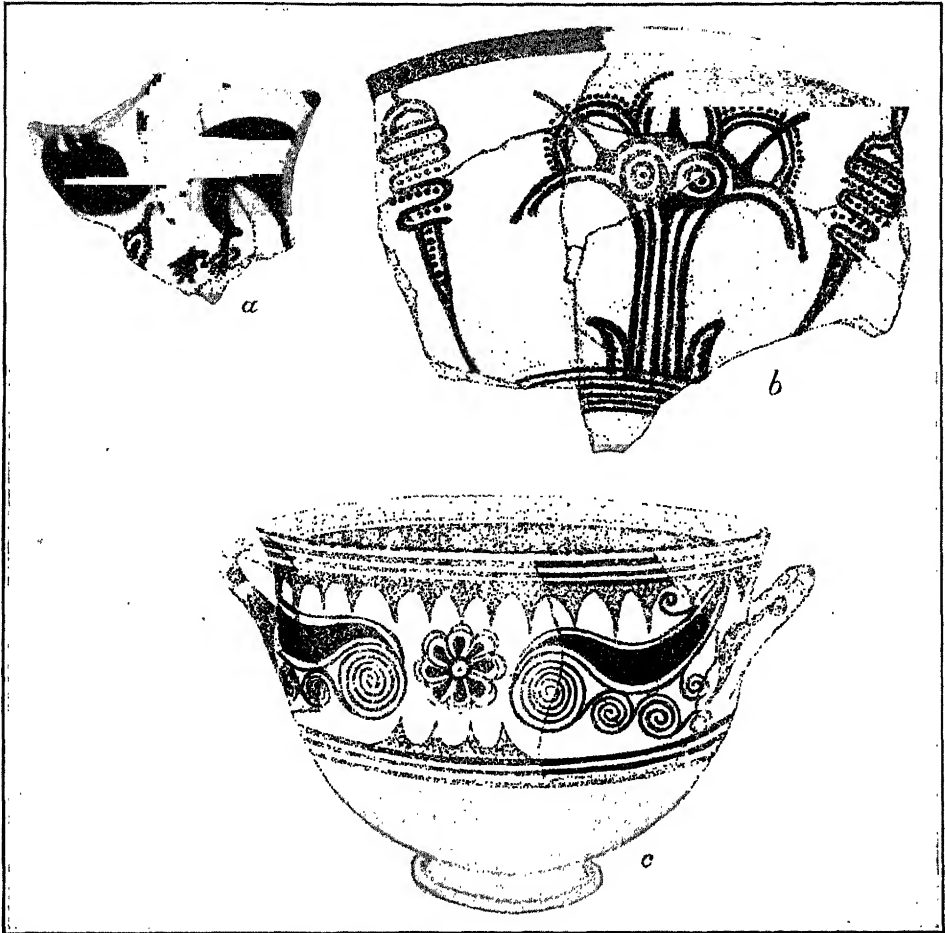


FIG. 25.—LATE HELLADIC II. (a), III. (b, c) POTTERY: *a*, *b* FROM SUPPORTING WALL OF GRAVE CIRCLE; *c* (restored) FROM EAST ROOM OF SOUTH HOUSE (Scale 1 : 2).

free, and therefore, as the wall here could not be supported by earth or rubbish thrown in against its face, it was necessary to give it a sharp batter to enable it to sustain not only its own weight, but also the weight of the double ring of slabs above.

Close to where the low wall (63) touches the supporting wall of the

double ring of slabs we made a test between the stones,<sup>1</sup> and found a great quantity of pottery, all of it L.H. III. There were several pieces of jugs of a hydria type, many fragments of kylikes including the fine one shewn in Fig. 25, *b*, not many deep bowls, very few pieces of stirrup-jars, spouted bowls and alabastra, and among the unpainted ware many shallow bowls with horizontal ribbon handles, similar to Pl. XI. *k*.

Then to test whether the character of the pottery changed towards the middle of this packed wall another horizontal test was made close by at a point where it was clear the wall had undergone no modern repairs. The results were as follows :—

From the surface of the wall to a depth of .20 m. all the pottery was L.H. III.

Between .20 and .60 m. inwards all the pottery was L.H. III., and included a kylix stem of the Zygouries type,<sup>2</sup> part of a stirrup-jar and a Mycenaean female figurine with crescent arms.

Between .60 and 1.00 m. all again was L.H. III., and included a terracotta female figurine and a two-handled mug of plain ware.

At a depth of 1.00 m. a few very small sherds were found; all so far as identifiable were L.H. III.

Again, on the top of the supporting wall to the west of the Second Shaft Grave we sank two test-pits to a depth of 2 m. to see if the character of the pottery found in the upper part of the wall corresponded with that found in the lower part. Here we found seventeen sherds of M.H. ware (including both Minyan and Matt-painted ware), and five sherds of L.H. I.–II. pottery; all the rest was L.H. III., which was extremely plentiful. There were jugs of a hydria type, deep bowls, kylikes, including one of the Zygouries type, and one with a murex pattern, stirrup-vases, kraters or stemmed goblets, and two animal and two female terracotta figurines of the ordinary Mycenaean types. There was also a considerable amount of plain domestic ware, especially shallow bowls.

The general character of all this L.H. III. pottery from the supporting

<sup>1</sup> Between the north-west angle of the First Shaft Grave and the south-west angle of the Fourth the outer face of this supporting wall is original. The rest of it both inside and outside has been largely rebuilt, as also the walls lining the Shaft Graves themselves. The walls round the Shaft Graves (supporting the edges of the excavation) and to the west of the Ramp House are also modern.

<sup>2</sup> *Art and Archaeology*, XIII. p. 216; cf. the Kalymnos vase, *B.M. Cat. Vases*, i. (1), Pl. XV., A. 1008 and a vase from Aegina, 'Εφ. 'Αρχ. 1910, Pl. VI. 5.

wall resembles that from the earlier strata of the section by the Lion Gate (pp. 20 ff. above), and is therefore to be placed early in the L.H. III. period, and to be regarded as only slightly later in date than the building of the Lion Gate and adjoining defences.

With this evidence before us we cannot come to any other conclusion than that the supporting wall of the double ring of slabs on the west was built early in L.H. III. times, probably soon after the beginning of the fourteenth century B.C., and that it and the acropolis wall are for all practical purposes contemporaneous.

At the entrance to the Grave Circle between it and the south front of the Granary two test-pits were dug.

#### *Finds.*

The upper level of the first pit from the surface to a depth of .30 m. gave this result :—

Middle Helladic, twenty-eight sherds including Minyan ware and Matt-painted, Groups B. I. and II.

Late Helladic II., three sherds.

Late Helladic III., forty-four pieces including kylikes.

Late Helladic in general, four sherds that cannot be assigned to any particular phase.

The next level between .30 and .65 m. when the rock was reached gave :—

Early Helladic, nine with black and seventeen with red glaze paint, nine coarse sherds and one odd piece with black-brown parallel lines on the inner surface.

Middle Helladic, two pieces.

The second pit gave in the first level this result :—

Early Helladic, one sherd with red paint.

Middle Helladic, fifty sherds, including Matt-painted Groups B. I. and B. II., and grey, Argive, and yellow Minyan ware.

Late Helladic I.-II., three sherds.

Late Helladic III., five pieces and two plain pieces which may be L.H. III. or possibly L.H. II.;

and in the lower layer down to the rock this result :—

Early Helladic, twenty sherds (including thirteen with red glaze paint), and twenty-two pieces of E.H. or M.H. coarse ware.

Just beyond the south-west angle of the Granary against the standing slabs (62), a trial pit sunk here to look for other possible Shaft Graves found a pocket of E.H. ware in a hollow in the rock. This can be classified thus :—



Early Helladic, with black paint, twenty-four sherds; with red paint, forty-three sherds; painted with hatched patterns in red on reddish, two sherds (Pl. XII. *i*);

Miscellaneous, twenty-one, including a flat base and a peculiar sherd of coarse ware with red-brown paint on one side and on the other a hatched pattern of slashed lines (Pl. XII. *o*).

Under the northern threshold slab of the Grave Circle we found :—

Early Helladic, five pieces.

Middle Helladic, twenty pieces, including Minyan and Matt-painted ware (Group B. I.), and twenty indeterminate pieces, mostly coarse and small.

Late Helladic, one plain sherd.

Under the innermost or southern threshold slab we found :—

Middle Helladic, one sherd, and thirteen plain pieces, most probably M.H.

Late Helladic III., one sherd.

Within the Grave Circle we made several tests along the eastern sector, where the double ring of slabs stands on the rock. We removed (and afterwards replaced) the two northernmost of the roofing slabs of the ring still *in situ* (64), and here found the following pottery :—

Early Helladic, one sherd.

Middle Helladic, seventeen sherds.

\* Late Helladic I, one sherd.

Late Helladic II., six pieces including an alabastron similar to those from Tombs 515 and 518. There were also twenty-two other sherds of plain, Yellow Minyan, and black or red glazed ware, which are probably L.H. I. or II. (cf. *Korakou*, p. 57, Fig. 78); these include three handleless cups.<sup>1</sup>

Late Helladic III., four fragments and three indeterminate pieces.

Two other tests between the upright slabs to the north and to the south of the roofing slabs still *in situ* gave similar results. The pottery found ranges from E.H. down to L.H. II. and III., but the latter ware is not common.

In the south-east sector of the circle, in making a sectional cut (Pl. XVI. *b*) across to study its construction, we found a row of pavement slabs laid on the ground along its inner side (59). These slabs which are 17 m. to 18 m. thick, from 70 m. to 90 m. in width, and about 1.20 m. long are principally of shelly limestone, the same material as that used for the double ring of slabs and for most of the grave stelai, but here and there slabs of poros occur in this pavement, as they do among the slabs of the ring and the grave stelai. These pavement slabs project inwards

<sup>1</sup> See below, pp. 150 ff.

from the inner face of the ring of vertical slabs almost exactly as far as the antae of the entrance project inwards. We have therefore assumed in the restored drawing in Pl. XVIII that this row of pavement slabs originally extended all round the inside of the circle. Probably the two slabs of rough limestone lying at about the same level against the inner face of the ring to the south-east of the Third Shaft Grave also formed part of this pavement (60). On a level with the bottom of and just below the pavement slabs, we found a thin layer of stone chips obviously produced by the dressing of the double ring of vertical slabs during construction (Pl. XVI. *b*). Immediately below the pavement slabs was a thin layer of M.H. pottery which seemed undisturbed, since in all the tests we made in it we found nothing but M.H. pottery, except for one sherd of L.H. I. ware. Below this M.H. layer and in a stratum of red earth on the very surface of the native rock was an E.H. layer, which also seemed to be undisturbed since we nowhere found any other pottery than E.H. in it. As shewn in the section (Pl. XVI. *b*), these Early and Middle Helladic layers are cut through abruptly by the trench in which the inner ring is bedded.<sup>1</sup> Also between the two rings of vertical slabs and in the similar trench cut down into the rock for the bedding of the outer rings of slabs, the stratification is disturbed. Here, E.H. and M.H. pottery were found mixed together among stones right down to the surface of the native rock. As can be seen by the section (Pl. XVI. *b*), when the Grave Circle was being built a trench about 1.60 m. wide was dug down to the rock. Then within and along the edges of that trench two other smaller and shallower trenches (.50 m. wide) were dug to receive the lower ends of the vertical slabs which were packed up all round with stones and earth. Earth and rubbish was thrown in between the upright slabs up to the top and then the covering slabs were laid across. Karo thinks the space between the vertical slabs was not filled up to the level of the top of the slabs, since otherwise the covering slabs would not have cracked and collapsed inwards. This hardly seems to have been the case. Probably the interspace between the two rings of slabs was filled up to the top before the covering slabs were placed in position. Then after a time the earth and rubbish between the two rings of slabs sank down and so caused the empty space observed by Karo just below the covering

<sup>1</sup> The E.H. layer we find again on the outside of the circle (see Pl. XVI. *b*), but the M.H. layer there had been disturbed.

slabs. Karo is quite right in his explanation of the rectangular sockets cut in the tops of the vertical slabs on the inside, and his account of the construction of the double ring thus corrects Schliemann's.<sup>1</sup> The rectangular sockets were to hold the ends of wooden struts that ran across from slab to slab (Pl. XVI. *b*). Their object (as in the case of the west wall of the palace at Knossos) was to keep the vertical slabs upright.<sup>2</sup> They also served to carry the weight of the covering slabs and prevent them from cracking, a fault to which both poros and shelly limestone are liable.

Elsewhere in the eastern part of the Grave Circle a thin E.H. layer was found directly on the surface of the rock and above it a M.H. layer the top of which seems to correspond approximately with the level of the threshold of the entrance. Practically no L.H. III. was found at this level and only very few sherds that could be classed as L.H. I. or II.

It is clear, however, from the trenches cut down to the rock for the erection of the vertical slabs of the double ring that the building of the circle is later than the M.H. period and the finding of the L.H. I., II. and III. sherds under the roof slabs seems to shew that it took place not earlier than the end of L.H. II. Thus the evidence obtained from the tests in the eastern sector does not really conflict with the overwhelming evidence of the pottery from the supporting wall on the west that the Grave Circle was constructed about the beginning of L.H. III.

#### THE HISTORY OF THE SHAFT GRAVES.

We now have to consider further information to be derived from Schliemann's excavation (see sections, Pl. XVII.) of the Shaft Graves. In excavating the Third Shaft Grave he found, two feet below the level at which the grave stelai still stood, two large horizontal slabs, and five feet lower still he found three more slabs, two standing and one horizontal.<sup>3</sup> Over the Fourth Shaft Grave at a depth of twenty feet from the original surface or about 4 m. below the level at which the grave stelai were standing, he found<sup>4</sup> a circular mass of Cyclopean masonry which he at first took to be a well. It was four feet high and seven feet

<sup>1</sup> Schliemann, *Mycenae*, p. 117, Fig. 190a: see Belger, *Jahrbuch*, 1895, p. 118.

<sup>2</sup> Evans, *Palace of Minos*, i. p. 128, Fig. 95.

<sup>3</sup> Schliemann, *Mycenae*, p. 161.

<sup>4</sup> Schliemann, *op. cit.*, pp. 212 ff., Pl. F.

across from north to south, and five-and-a half feet across from east to west, and had a round opening in the middle. This he was probably right in recognising as an altar for libations or other offerings over the grave. It was not unlike the altar in the court of the palace at Tiryns.<sup>1</sup> Below the altar again he found two horizontal slabs and a short column. When we insert these monuments on a section drawn through the Grave Circle as in Pl. XVII., we see at once that the level at which they stood exactly corresponds to the level of the top of the rock between the Third and Fourth Shaft Graves, and also to the level of the rock surface below the supporting wall on the west. Thus with the grave stelai which Schliemann found still *in situ* over the Third Grave and with these monuments found at a much lower level, the level of the original rock surface, we have two clearly distinct strata which should therefore mark two separate periods in the history of the Shaft Graves themselves.

In the First Shaft Grave Schliemann<sup>2</sup> found at two to two-and-a half feet below the level at which the unsculptured stelai were still standing *in situ* over it, the fragments of 'two other tombstones also unsculptured.' These, however, may have been merely some of the slabs which roofed in the grave shaft.<sup>3</sup> In the Fifth Shaft Grave<sup>4</sup> he found a curious sort of monument at a depth of three-and-a quarter feet below the level at which the sculptured grave stelai on this tomb had stood. It consisted of two long slabs lying one upon the other, and a smaller slab laid obliquely at one end of them. If we draw a line on the section (Pl. XVII.) from the top of the rock west of the Fifth Grave we find that it passes just under the level given by Schliemann for this monument. It is therefore possible that here again we have the remains of an earlier monument over the Fifth Shaft Grave which stood at the level of the original rock surface, as in the case of the Fourth and Third Graves.

Bearing in mind all the facts just related, and the evidence obtained from our previous survey of the area surrounding the Grave Circle, we can attempt to reconstruct its history thus.

<sup>1</sup> Schliemann, *Tiryns*, p. 206; the Tiryns altar, though rectangular, contains a ring of masonry not unlike the circular coping of a well shaft.

<sup>2</sup> *Op. cit.*, p. 155.

<sup>3</sup> Over the Second Grave, where Schliemann found a sculptured stele *in situ* at the higher level, there were 'two unsculptured stelai' at a lower level (Schliemann, *Mycenae*, p. 291). These were just above the grave (see Pl. XVII.) and so probably were roofing slabs.

<sup>4</sup> *Op. cit.*, pp. 151 ff.

At the beginning of the Bronze Age Mycenae was inhabited by the people who made E.H. ware. The correspondence between the earliest ware found on the surface of the native rock at Mycenae and that from the lowest strata at Korakou<sup>1</sup> and Gonia indicates that the inhabitation of both sites began about the same time, the beginning of the Bronze Age on the mainland, roughly about the middle of the Third Millennium B.C. The E.H. pottery from Mycenae appears older than that from Tiryns, and therefore the theory hitherto held that Tiryns was the older settlement must be abandoned.<sup>2</sup> Further, well-developed E.H. pottery was found by Stamatakes in his excavations in the Grave Circle, but was long left unnoticed first in the small museum at Mycenae and later in the cellar of the Nauplia Museum.

*Pottery found by Stamatakes.*

This can be classified thus :—<sup>3</sup>

Group A. II. Slipped ware, one sherd covered with a thin creamy slip well polished, inscribed in pencil 22/3 Κυκλ. T. 5μ.<sup>4</sup>

Group B. I. Ware partly covered with brown-black glaze paint, two pieces of large jars similar to *Korakou*, p. 8, Fig. 8; both sherds are marked in pencil 22/3 Δ 4μ. Κυκλ. T.

Group B. II. Glazed ware, covered all over with brown-black paint, the spout (·12 m. long) and the handle of sauceboats, and a fragment of a large jar or pithos decorated with parallel bands of raised rope pattern (Fig. 26, f, g, i).

Group C. I. Patterned ware, two sherds from tankards,<sup>5</sup> one red-brown on a buff ground and the other black on buff; the former belongs to Blegen's Group C. I. a, as the ground is open, and the latter to his Group C. I. b, as the pattern is painted on a reserved belt. Both sherds are marked 22/3 4μ. Κυκλ. T. and are shewn in Figs. 26, a, 27, b; and another

<sup>1</sup> See Blegen, *Korakou*, pp. 4 ff.

<sup>2</sup> Cf. Karo, *Führer d. d. Ruinen v. Tiryns*, p. 35; Schuchhardt, *Schliemann's Excavations*, p. 96; Fimmen, *Kretisch-Mykenische Kultur*, p. 214.

<sup>3</sup> Cf. Blegen, *op. cit.*, loc. cit.

<sup>4</sup> Κυκλ. T. stands of course for Κύκλος Τάφων: Schliemann never wrote on his pottery in Greek; Keramopoulos' finds are all in Athens; Prof. Tsountas tells me these are not his finds and that therefore they can only have come from Stamatakes' excavations, the only other person who ever dug in the Grave Circle. Stamatakes was at Mycenae from November 1877 till March 26th 1878, when he began the excavation of the Heraion Tomb (Πρακτικά, 1877, p. 29; 1878, p. 17; *Ath. Mitt.* 1878, p. 271).

<sup>5</sup> There are also ten other pieces of tankards not definitely marked Κυκλ. T., but with pencil notes of the same character, and eight other patterned sherds with no pencil marks, so that although they are all from Mycenae their exact provenance is unknown.

sherd with a black pattern on an open white ground bears the same pencil notes. There is one other fine sherd from the top of a big

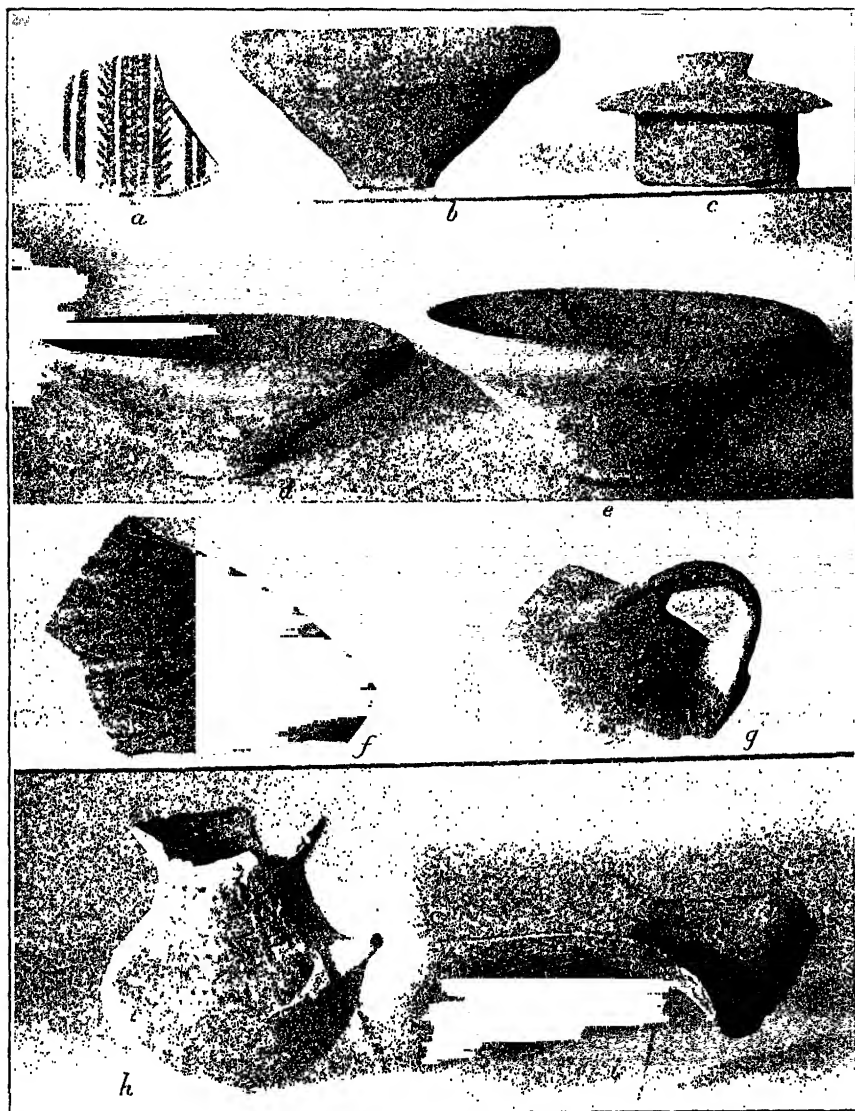


FIG. 26.—GRAVE CIRCLE: EARLY HELLADIC VASES FOUND BY STAMATAKES  
(Scale 1 : 3). Nauplia Museum.

tankard with indistinct pencil marks on it, Fig. 27, *e*. Both the open ground and the reserved belt styles are represented, Fig. 27, *a, c, d, f, g, i*. Two fragments of bases have linear pattern on the outside, Fig. 27, *h*.

Group C. II. Light-on-dark ware, three sherds but without pencil notes, but as they were with the other Mycenae pottery the probability is that they come from Stamatakes' excavations.

Group D. Unpainted ware. Four bowls of the typical shape more or less complete (Fig. 26, *b, d, e*). Three are marked 22/3 Κυκλ. T. 5μ. and one 22/3 Κυκλ. T. 4μ.



FIG. 27.—GRAVE CIRCLE : EARLY HELLADIC POTTERY FOUND BY STAMATAKES. (Scale 1 : 2).  
Nauplia Museum.

There are five other pieces of similar bowls of which two are marked 22/3 4μ. Κυκλ. T.

Lid of jar, Fig. 26, *c*, marked 22/3 Κυκλ. T. 4μ.

Side of jar with a double lug at its widest part pierced with two holes for suspension or for tying on the lid, marked 22/3 Κυκλ. T. 5μ.

Part of a jar with a tall narrow neck, no pencil notes, height .11 m.

Incised ware, a small jar, .10 m. high and diameter at mouth .06 m. (Fig. 26, h). There are holes in the lip for tying on a lid. On the body there is a pierced lug on either side for suspension. Round the shoulder and base of the neck runs a design of oblique incised lines sandwiched between double rows of dots. This vase resembles in fabric and pattern one from Korakou which Blegen compares to the incised ware of Olympia.<sup>1</sup>

#### *Early Helladic Period.*

Thus the evidence both from our own and from Stamatakes' excavations makes it quite clear that Mycenae was a populous settlement in E.H. times, though we cannot say how far this occupation spread over the actual area of the Grave Circle and its neighbourhood. The absence of walls and the fact that this was a sloping hillside, outside any early system of fortification that could have existed, make it unlikely that the occupation of the Grave Circle area was anything more than casual or sporadic. We can assume that at this time and for long afterwards the site now covered by the Grave Circle, the Lion Gate and the other buildings just surveyed was a sloping hillside with a small temporary hut here and there wherever the ground was favourable. This would account for the pockets of E.H. pottery on the surface of the rock. It should be borne in mind that, as no whole vases were found at this depth, the probability increases that the deposit, which in any case is thin, is merely scattered rubbish, and not the débris produced by close and continuous inhabitation. The finding of the well-developed E.H. pottery at a low depth in the Grave Circle by Stamatakes is due probably to another factor to which we shall come later.<sup>2</sup>

#### *Middle Helladic Period.*

In M.H. times also we must consider the Grave Circle area to have continued as a sloping hillside. There are, however, three walls that may perhaps belong to this period. One lies at the foot of the Ramp close to the south-east angle of the Granary (21), another lies in the lowest level on the rock below the Ramp House (40, 41), and the third is a short stretch of rough wall in the south-east sector of the Grave Circle itself (61). Consequently, there may have been some limited inhabitation of the site.

<sup>1</sup> Cf. Blegen, *Korakou*, p. 14, Fig. 17 and *Ath. Mitt.* 1911, Pl. V.

<sup>2</sup> See below, p. 123.



But at this time the whole area began to be used as a cemetery,<sup>1</sup> from the Granary in the north to the South House in the south.

#### THE MIDDLE HELLADIC CEMETERY.

The width of the cemetery we do not know, but it is quite likely that it extended to the west outside the present course of the acropolis wall. It is hardly likely to have extended further east, since just beyond the limit of the Grave Circle on that side, that is to say along a line drawn from the east side of the Lion Gate under the Ramp to the east wall of the Ramp House, the soft rock, in which the Shaft Graves were dug, comes to an end and here begins the hard limestone of which the whole of the upper part of the acropolis rock is composed. Thus assuming that in early times there was a settlement on the summit of the citadel,<sup>2</sup> where the Palace was afterwards built (and we have plenty of evidence for such an early settlement in the Early and Middle Helladic pottery found below the walls and floors of the Palace<sup>3</sup>) the area of the soft rock of the Grave Circle and its neighbourhood was the nearest spot to the summit of the acropolis where it was possible to cut graves. The hard limestone rock of the upper part of the citadel was naturally most unsuitable. To the M.H. Cemetery belonged the grave under the east room (58) of the South House,<sup>4</sup> the three certain and the other possible graves under the Ramp House (38-40, 44),<sup>5</sup> the four graves found by Stamatakis in the eastern part of the Grave Circle,<sup>6</sup> and the graves found by Schliemann to the east of the Third Shaft Grave.<sup>7</sup> Of these graves Schliemann says, 'At about nine feet above the mouth of this tomb I discovered close to it on the slope of the rock at a depth of twenty-one feet below the former surface a number of skeletons of men which had evidently not been on the funeral pyre, but were so much destroyed by the moisture that none of the skulls could be taken out entire. The only objects I found with them were knives of obsidian and five very pretty hand-made vases, two of which are of a plain light yellow, the three others of a light green colour with rude black ornamentation.' Thanks to the illustrations given and

<sup>1</sup> Intramural burials are a M.H. feature (Fimmen, *Kretisch-Mykenische Kultur*, p. 54), but these burials certainly seem to belong to a cemetery.

<sup>2</sup> As on the Aspis at Argos, see Vollgraff, *B.C.H.* 1906, pp. 4 ff.

<sup>3</sup> See below, pp. 197 ff., 209, 217, 223 ff, 239.

<sup>4</sup> See p. 94.

<sup>5</sup> See p. 76.

<sup>6</sup> Tsountas-Manatt, *Myc. Age*, p. 97.

<sup>7</sup> Schliemann, *Mycenae*, pp. 162, 163.

the description these five vases can be identified with certainty as five M.H. vases which have been wrongly assigned to the Third Shaft Grave.<sup>1</sup> Tsountas<sup>2</sup> also considers that some of the shallow cuttings in the rock round and under the House of the Warrior Vase were the remains of graves. If so, they also would have been of the M.H. period.

#### THE TOMBS OF THE SHAFT GRAVE DYNASTY.

At the end of this period, not long before the beginning of the sixteenth century B.C., part of this cemetery became reserved for royal interments. Perhaps just about this time a new dynasty occupied the throne of Mycenae. At all events from this time onwards Mycenae, which had certainly been flourishing before, now began to be extremely prosperous. From the fact of their having been laid in these graves we may call this, the first Mycenaean dynasty that we can envisage, the Shaft Grave Dynasty. During the course of the sixteenth century B.C., six royal graves were dug here close to one another, and in them nineteen persons were buried. Further to the north of the Grave Circle under the Granary, yet another was dug,<sup>3</sup> and to the south of the Grave Circle at the spot where Schliemann found the Golden Treasure, there was probably once another Shaft Grave.<sup>4</sup> Schliemann and his helpers certainly thought that this was the remains of a Shaft Grave which had been found and partly plundered and damaged when the water channel was constructed. Of these graves the Sixth is now recognised, by the pottery found in it by Stamatakes, as undoubtedly the earliest, and the first interment in it should be placed at the end of the M.H. period.<sup>5</sup> Next in point of date is the Second which contained a large jug of Matt-

<sup>1</sup> Schliemann, *Mycenae*, p. 163, Figs. 236, 237; Furtwängler-Loeschcke, *Myk. Tongefässe*, Pl. IV., 16, 17; cf. Schuchhardt, *op. cit.*, p. 209.

<sup>2</sup> Tsountas-Manatt, *Myc. Age*, p. 114.

<sup>3</sup> See above, pp. 55 ff.

<sup>4</sup> Schliemann, *Mycenae*, pp. 350 ff., Pl. G. Schuchhardt's view (*Schliemann's Excavations*, p. 275) is not a first-hand opinion: contrast Tsountas in Tsountas-Manatt, *op. cit.*, p. 114.

<sup>5</sup> Cf. *B.S.A.* xxii. p. 186; cf. Evans' remarks on the pottery of this grave (*Palace of Minos*, i. pp. 560 ff.); he calls the jug of the Sixth Shaft Grave type from Phylakopi (*Phylakopi*, p. 159, n. 2) 'Mature Middle Cycladic III.'; Karo in his unpublished paper for *Ath. Mitt.* 1915 has valuable observations on this point; and the Korakou stratification (Blegen, *op. cit.*, pp. 28, 122 ff.) confirms this. Schuchhardt (*Schliemann's Excavations*, pp. 274 ff.) is mistaken in thinking the Sixth Shaft Grave the latest.

painted ware,<sup>1</sup> Group B. III., and a cup of thin gold<sup>2</sup> very similar to that from the Sixth Grave. Not much later would be the earliest elements<sup>3</sup> in the Fourth and Fifth Graves, both of which contained several bodies. The two latest would be the Third and First Graves, but even these do not come down so late as the end of the sixteenth century B.C. That is to say this series of the six royal Shaft Graves stops before the end of L.H. I. The Shaft Grave under the Granary is probably later than any of the other six, and may belong to L.H. II., but the plundered grave represented by the Golden Treasure found by Schliemann to the south of the Grave Circle should probably be dated to the first half of L.H. I. Thus, though the cemetery remained in use throughout L.H. I., we have no definite evidence that it was still used for royal interments in the succeeding periods, though the Shaft Grave under the Granary may have been made then. It is possible that this cemetery may have no longer been used for royal interments because a new dynasty now sat on the throne of Mycenae.

*Late Helladic I. and II. Periods.*

From about the end of L.H. I. begins the series of Tholos Tombs which from their impressive size and noble architecture we can only regard as the tombs of kings. The Tholos Tombs,<sup>4</sup> beginning towards the end of L.H. I., continue right through the next (L.H. II.) and well into the last phase (L.H. III.). The different method of burial inclines us to the belief that a change of dynasty took place at Mycenae, and we may call this, the second dynasty, the Tholos Tomb Dynasty. A change of dynasty exemplified by a total change in the method of interment would well account for the abandonment of the Shaft Grave cemetery. The Shaft Graves<sup>5</sup> are in themselves only elaborate or royal versions of the

<sup>1</sup> Schliemann, *Mycenae*, p. 293. This vase has by mistake been transferred by Furtwängler-Loeschcke (*Myk. Tongefässe*, Pl. I. (1)) to the First Shaft Grave, and is so placed in the National Museum, Athens. Schliemann's notebook states definitely that it belonged to the Second (his 'Fifth') Shaft Grave.

<sup>2</sup> Schliemann, *Mycenae*, p. 292, Fig. 453.

<sup>3</sup> The polychrome light-on-dark sherds (Furtwängler-Loeschcke, *Myk. Tongefässe*, Pl. VI.) may not have been actually part of the contents of this grave, but merely some of the broken pottery found by Schliemann (*Mycenae*, pp. 212 ff.) above it. One should be cautious in using them for chronological purposes, cf. Evans, *Palace of Minos*, i. pp. 598 ff.; Fimmen, *Kretisch-Mykenische Kultur*, p. 212.

<sup>4</sup> See below, p. 283 ff.

<sup>5</sup> No Shaft Graves have yet been found in Crete which can be considered as even approximately contemporary to these at Mycenae. The Shaft Graves in the Zafer Papoura cemetery (Evans, *Prehist. Tombs*, pp. 11 ff.) are L.M. II.-III. and so over a century later.

ordinary M.H. grave such as those found below the Ramp House. The likeness between the Second Shaft Grave and the M.H. grave below the northern part of the Megaron of the Ramp House is unmistakable. The Shaft Grave below the Granary is of the same type and the transition from these to the largest and most elaborate graves such as the Fourth or Fifth is easy. The lining of the grave shafts with rubble walls was undoubtedly to facilitate roofing, so as to make secondary interments a simple matter. These royal graves were family graves and in such secondary interment would take place, while in the small private graves like the M.H. grave under the South House, there would be no secondary interments.

#### SACRED CHARACTER OF ROYAL TOMBS.

When the royal graves were first made on the sloping hillside, grave monuments were erected over them on the original (lower) surface level. Of these monuments Schliemann <sup>1</sup> found remains over the First,<sup>2</sup> Third, Fourth and Fifth Shaft Graves, and as indicated by Mr. Heurtley below,<sup>3</sup> it seems highly probable that the sculptured grave stelai formed part of these original grave monuments, though subsequently removed to the new (higher) level. Although burial ceased here before the end of L.H. I., yet apparently, as shewn by Keramopoullos in his account of the small cave in the rock (65) between the First and Fourth Graves,<sup>4</sup> offerings continued to be made to the shades of the kings who lay here. It seems clear from the investigations of Sir Arthur Evans and others that Minoan kings were regarded as semi-divine personages. The Mycenaeans seem as far as we can tell to have adopted the Minoan religion. Thus naturally the graves of the kings buried in the Shaft Grave cemetery would have been regarded as sacred. The kings were the temporary human manifestations of divinities, and to them as such all due rites and offerings were paid. When therefore this temporary personification of a deity was withdrawn from earth, the spot where its human tenement was preserved with all its proper state inevitably became sacred. The place where it was deposited was marked with a suitable monument, and the living sought not only the protection of the king who had been taken away,

<sup>1</sup> *Mycenae*, pp. 151, 161, 212-214.

<sup>2</sup> The 'Tombstones' found at the lower level over this and the Second Grave may have been merely roofing slabs, see above, p. 113.

<sup>3</sup> See pp. 138 ff.

<sup>4</sup> 'Εφ. 'Αρχ. 1918, p. 52 ff.

but also his intercession with the deity whose vicegerent he had been on earth. The central point for this cult, as suggested by Keramopoullos, was probably the knob of rock which rises between the Fourth and First Shaft Graves. The cult would have flourished here on the sloping hill-side throughout the First and Second Late Helladic periods from the time when the first royal interment took place. But just at the end of L.H. II. or just after the beginning of L.H. III., at all events about the beginning of the fourteenth century B.C., a great transformation was brought about.

*Late Helladic III. Period.*

At the end of L.M. II. towards the close of the fifteenth century the Palace of Knossos was destroyed, and with it the political power of Crete, which had been declining, seems to have been completely overthrown. With the downfall of Crete the centre of political power appears to have been transferred to the mainland, and Mycenae, already a strong and rising state, became its seat. It would then have been under the rule of a rich and powerful prince of the Tholos Tomb Dynasty. He rebuilt the palace on the summit of the acropolis, and replanned the whole citadel and enlarged its area. We assume one king to have been responsible for all this building activity, for so far as the archaeological evidence goes, all these buildings must have been constructed within a comparatively short time. Certainly there is no improbability in assuming that they were all erected in the lifetime of one monarch.

CONSTRUCTION OF GRAVE CIRCLE.

In laying out the line of the Cyclopean wall which was to encircle the citadel, it was found that the wall which should run south-west from the great bastion (1) on the west of the Lion Gate<sup>1</sup> would not only run through the old cemetery, but even cut right through the middle of the sacred royal tombs. The Cyclopean wall therefore was made to curve out westwards in a great bow so as to avoid the royal graves. At the same time it was resolved to enclose and preserve as a kind of temenos the sacred area where the kings still lay in state. This was done by enclosing the sacred spot with the elaborate double ring of vertical slabs

<sup>1</sup> As can be seen from the north or Postern Gate at Mycenae and the main gate at Tiryns, it was the Mycenaean system to put the gates at set-backs in the line of the wall.

with their massive covering stones and monumental entrance leading from the Lion Gate (Pls. I., XV.), but since this was a sloping hillside special constructions had to be undertaken to level the ground (cf. Pl. XVII.).

On the west just beyond the royal graves the wide supporting wall was built. This has a pronounced batter on its outer, western, side, but was practically vertical on its inner, eastern, side. On the top of this wall the double ring of upright slabs was then erected. On the other hand, in the eastern part of the circle, as planned, the hillside was too high. Consequently, the ground was cut away here, and the double ring of slabs embedded in the native rock.<sup>1</sup> Even thus the space so made was not level, for it had a marked slope from east to west. The soil and rubbish dug away on the eastern part of the circle, including the E.H. pottery found by Stamatakes,<sup>2</sup> was shot down into the western part so as to fill it up to the level of the top of the supporting wall. This is made clear by Schliemann's observations at the time of his excavations. Further, the outer or battered side of the wall was meant to stand without any support, hence the batter. The inner or vertical side was meant to be filled up to its top with earth thrown against it, otherwise it would have been unsafe.

The throwing in of earth to level up the area on the west explains both the absence of natural stratification noted by Schliemann and the presence deep down within the Grave Circle of the L.H. III. pottery found by Schliemann and Keramopoullós. That late Middle Helladic and early Late Helladic strata once existed in the eastern part of the Grave Circle is suggested also by the stratification found immediately to the south of the Grave Circle, between it and the Ramp House. Further, the existence of only Middle and Early Helladic strata below the pavement slabs and the double ring in the east of the circle is explained by the digging away of the upper strata on this side during the levelling operations. This also explains the almost complete absence of any L.H. I.-III. pottery in natural stratification on this side, while the supporting wall on the west is full of L.H. III. fragments.

When the ring wall was completed, and the imposing entrance leading in from the Lion Gate made, the sculptured grave stelai which had stood over the graves at the original level on the sloping hillside were re-erected

<sup>1</sup> See above, pp. 111 ff.

<sup>2</sup> See above, pp. 114 ff.

over the graves at the new level on even ground. The Grave Circle at this time would have had approximately the appearance shewn in the restored drawing in Pl. XVIII.

It has been assumed by some that the Grave Circle was merely the enclosing ring for the base of a tumulus.<sup>1</sup> Keramopoulos<sup>2</sup> is the last to show that this theory cannot hold. Had a tumulus been built up over the circle then it would have been useless to re-erect the grave stelai at the new level. The entrance to the circle would have no meaning, and the pavement slabs<sup>3</sup> laid along the inner ring would be equally useless.

As a funeral monument the Grave Circle has no near parallel. The only remains that in any way resemble it are the circles of stones built round groups of cist graves found by Dörpfeld in Leukas.<sup>4</sup> These, each of which seems to have been made to enclose a group of graves belonging to one family, are older than the Grave Circle, and fall into three groups. The first group, which is E.H., because sauceboats and other typical E.H. pottery were found in them, consists of cist graves (or in one case of a small chamber built of packed stones) enclosed by a ring of stones. The second group, which is M.H. from the pottery found in them, consists of cist graves or graves covered with half pithoi like the M.H. graves at Orchomenos, again enclosed in rings of stones. The third group, also M.H., but probably later than the second group, consists of a series of cist graves of slabs enclosed within a rectangular enclosure<sup>5</sup> of stones which had been enlarged at one place. It was in one of the graves in this enclosure that a curious spear-head<sup>6</sup> similar to one<sup>7</sup> from the Fourth Shaft Grave was discovered. A third spear-head of this type was found by Tsountas in a cist grave at Sesklo in Thessaly.<sup>8</sup> No weapons like this have been found in Crete, and it may well be of Helladic origin. At all events it forms another link between Leukas and Mycenae. The simple cist graves enclosed in a ring of stones are the ordinary method of family

<sup>1</sup> Cf. Tsountas-Manatt, *Mycenaean Age*, p. 108.

<sup>2</sup> 'Εφ. 'Αρχ. 1918, p. 57.

<sup>3</sup> See above, pp. 110 ff.

<sup>4</sup> I have to thank Prof. Goessler for information on these: cf. Doerpfeld, *Sechster Brief über Leukas-Ithaca*, pp. 9 ff.

<sup>5</sup> It is just possible that the M.H. walls observed by the graves under the Ramp House may be part of a similar rectangular enclosure.

<sup>6</sup> Doerpfeld, *Vierter Brief über Leukas-Ithaka*, p. 10, Fig. C.

<sup>7</sup> 'Εφ. 'Αρχ. 1898, p. 191.

<sup>8</sup> Wace-Thompson, *Prehistoric Thessaly*, p. 68; Tsountas, *Προϊστορικαὶ Ἀκροπόλεις*, Pl. IV (10).

burial in contrast to the elaborate shafts containing the remains of royalty and surrounded by the imposing circle of slabs at Mycenae. If we are right in assuming the Shaft Graves to be those of one dynasty, they find a good parallel in these family grave rings in Leukas. Thus we recognise that the king of Mycenae who enclosed the graves of a bygone dynasty within the stone circle was following a tradition derived from E.H. times. It is remarkable that the princes of Mycenae, for all the splendour of the Minoan gear laid with them, were yet buried after the manner of Early and Middle Helladic times. We know now that the Sixth (and earliest) Shaft Grave stands at the end of the M.H. period, and cannot thus be so far removed in date from the rectangular enclosure at Leukas. Although at the end of the M.H. period the Minoan civilisation established itself on the mainland of Greece, and culturally completely dominated it, yet it did not apparently change the fundamental ideas and customs of the population. Later, when the brilliance of Minoan art had ceased to be a new thing to the mainlanders, and even Knossos itself was declining, then the latent essential strength or obstinacy of the Helladic character gradually asserted itself, and so brought about the difference which we can observe between Minoan and Mycenaean art. From this, after the fall of Crete at the beginning of the fourteenth century, arose the great power and wealth of Mycenae.

Once the Grave Circle was built and the royal tombs protected and preserved as a temenos, the rest of the cemetery was used as building land, and over it were built the South, Ramp, and Warrior Vase houses, as well as the Granary. It is possible that when the Granary was erected, the contents of the Shaft Grave below it were deliberately removed and placed elsewhere, perhaps within the Grave Circle. It seems, however, more likely on the whole, that this grave, as well as that which contained the Golden Treasure to the south of the Circle, was found during subsequent building operations, and then plundered.

#### *Later History of the Site.*

The Grave Circle seems to have remained in use as a cult centre till the downfall of Mycenae in the twelfth century B.C. The only changes that occurred took place outside it. For instance the south extension of the Granary was built (south of 10 and 11), the roadway was widened just before it, and so the entrance to the Grave Circle from the Lion



Gate was partially obstructed. Even at the time of the fall of Mycenae the Grave Circle does not seem to have suffered any deliberate destruction. The stelai were left standing and though their tops are broken off, that might easily have been caused by decay of the stone or some similar accident. At all events after the fall of Mycenae the Grave Circle seems to have remained practically untouched, and to have gradually filled up with accumulated earth and débris washed down by the winter rains from the upper part of the acropolis. The passage between the supporting wall of the Grave Circle and the acropolis wall seems to have remained open till a comparatively late date as shewn by the Hellenic and Hellenistic walls built between the two on the south-west.

Nothing seems to have been built within or over the Grave Circle, either in Hellenic or in Hellenistic times. Probably the tradition of sanctity clung to the spot, and made it respected; and its echo still lingered when Pausanias visited Greece. This very tradition, hallowing the graves of a dynasty whose kingdom had long since followed its rulers into comparative oblivion, even then regarded this place with awe as containing the mortal remains of Agamemnon and his companions, the victims of one of the bloodiest dramas of the House of Atreus. The intuition of Schliemann enabled him to divine the existence of royal graves within the Lion Gate, and rediscovered to the world the brilliance of the civilisation which Homer had celebrated. Schliemann, however, could not, with the scanty knowledge then at command, see his wonderful finds in their true perspective. The work of Tsountas and Evans, to mention the two most prominent investigators only, has given us an outline of the history of those times.

Our knowledge is still extremely imperfect; but the little we have done towards unravelling the history of the Grave Circle, in itself an epitome of the history of Mycenae, will, we hope, make the way a little clearer for our successors.

A. J. B. WACE.

#### 8. THE GRAVE STELAI.

Since Reichel published his article in 1893,<sup>1</sup> no further work has been done on the fragments of Mycenaean stelai lying in the National

<sup>1</sup> *Eranos Vindobonensis*, pp. 24 ff. : K. Müller has written on their artistic relationships in his article, *Frühmykenische Reliefs*, *Jahrbuch*, 1915, pp. 286 ff.

Museum. The recovery of another fragment of No. IV. during the excavations of 1920 has led to a fresh study of all the fragments, the results of which may be summarised as follows :—

No. III. Five fragments have now been joined, and with another, which clearly belongs, it is possible to determine the character of this stele, which has four parallel rows of spirals, not two (as Reichel supposed).

No.	Reichel.	B.S.A.	Schliemann.	Schuchhardt, Eng. Edit.	Athens Nat. Mus. Inv.	Notes.
I.	1	Pl. XIX.	No. 24	No. 147	1427	Made up of 5 fragments.
II.	2	Fig. 28.	142		1430	
III.	3	Fig. 29.			Included in Nos. 1434-1466	
IV.	4	Pl. XX.	141, 145	145	1429	VI.a = 3 fragments put together by Reichel.
V.	5	Pl. XX.	140	146	1428	
VI.a	6	Pl. XXI.	144, 149		1431	
VI.b						VI.b placed here, because the borders correspond.
VII.a	7a	Pl. XXI.			Included in Nos. 1434-1466	For Reichel's VII.b see IX.b below.
VII.b			147, 148		...	The new VIII.a = Reichel's VIII.a with another fragment not mentioned by him, shewing the wheel of a chariot.
VII.c					...	
VIII.a	Includes 8a	Fig. 30.			...	
VIII.b	8b		146		...	
VIII.c	8c				...	These 2 fragments are classed together conjecturally. They do not join. Reichel's measurements do not correspond with the present condition of the fragment IX.a. IX.b is made up of 3 fragments which have been joined, one is Reichel's 7b. See text on VI. Reichel does not mention the fragment with two wheels.
VIII.d					...	
IX.a	9	Fig. 30.			...	
IX.b	Includes 7b				...	These fragments cannot be associated with the others. Some are very much defaced, e.g. XII. f-i, especially.
X.a	10	Fig. 31.	143		...	
X.b	11				...	
XI.a	12	Fig. 31.			...	
XI.b	13				...	
XII.a		Fig. 32.	150		...	
XII.b		"			...	
XII.c		"			...	
XII.d		"			...	
XII.e		"			...	
XII.f		"			...	
XII.g					...	
XII.h					...	
XII.i					...	
XII.j					...	
XII.k					...	
XII.l					...	

No. IV. is now practically complete.

No. VII. Two more fragments have been joined to Reichel's VII. and shew that it had a vertical border of spirals. (Reichel's VII.b belongs to IX.b below.)

No. VIII. Another fragment, not mentioned by Reichel, has been joined to his VIII.a. Parts of two scenes, separated by a horizontal

fillet, are now recognisable, the upper shewing a chariot and the lower the heads of two warriors.

No. IX.*b*. This interesting piece with which IX.*a* (Reichel's IX.) is provisionally classed, is made up of three fragments which have been found to join. The fragment shewing two wheels was apparently not seen by Reichel, as he does not mention it. There is some reason to suppose that these fragments belong to Stele VI. which may have been wrongly restored.

The existence of more than eleven stelai is doubtful.

All the fragments are now numbered. Reichel's numbering is kept as far as possible, but where fragments have been newly joined, only one number is given to the new fragment thus formed. In some cases his fragments have been re-grouped and so the old and new numbers are here arranged in parallel columns (p. 127), together with reference to Reichel and to the illustrations in Schliemann or Schuchhardt, which are consequently not repeated in the description of the stelai below.

Finally, an attempt is here made to classify the stelai according to style and technique, and to consider if any light can thus be thrown upon their relation to Mycenaean art as a whole, and their distribution over the shaft graves in particular.

No. I. Pl. XIX. Measurements: H. 1·12 m. W. 1·23 m. Th. 145 m. Material, Poros. Found *in situ* above Fifth Grave.

Enclosed at the sides in a border of stylised foliate ornament<sup>1</sup> and below by three plain bands, are two scenes, one above the other. In the lower, a lion extended almost at the 'flying gallop,' chases an animal which has been variously described as a wild goat, an antelope and an ibex. Above, a chariot is represented, horse-drawn, moving to the right through rocky country.<sup>2</sup> In it a man stands erect, holding in his left hand the reins and in his right a short sword or dagger.<sup>3</sup> Below the horse a man lies, covered, but for head and feet, by a large figure-of-eight shield.<sup>4</sup>

This stele is badly weathered,<sup>5</sup> and the top part is missing.

The relief is low and the outlines are not so clean-cut as in the stelai of

<sup>1</sup> Cf. Schliemann, *Mycenae*, Figs. 305, 369, 467; Evans, *Palace of Minos*, i., Figs. 151 (for an antecedent stage), 87 (5), 92 (g), 186 (c); Bossert, *Altkreta*, Fig. 233.

<sup>2</sup> For conventionalised scenery, cf. the Vaphio Cups, and the relief from Palaikastro, *B.S.A.* xi., p. 285, Fig. 14a.

<sup>3</sup> The sword looks like the broad triangular-shaped sword in Stele V.

<sup>4</sup> The man's head has been taken for the horns of the animal.

<sup>5</sup> It is surely incorrect (Evans, *Times Lit. Suppl.*, July 15th, 1920) that this stele shews 'clear traces of the incisions by which an original coating of painted stucco had been attached.'

Class II., while the background has been left rough. The drawing, however, is much in advance of all the other stelai, and shews appreciation of form and feeling for movement. This is the only stele on which all four legs of each animal are represented. The inner markings are also unique.

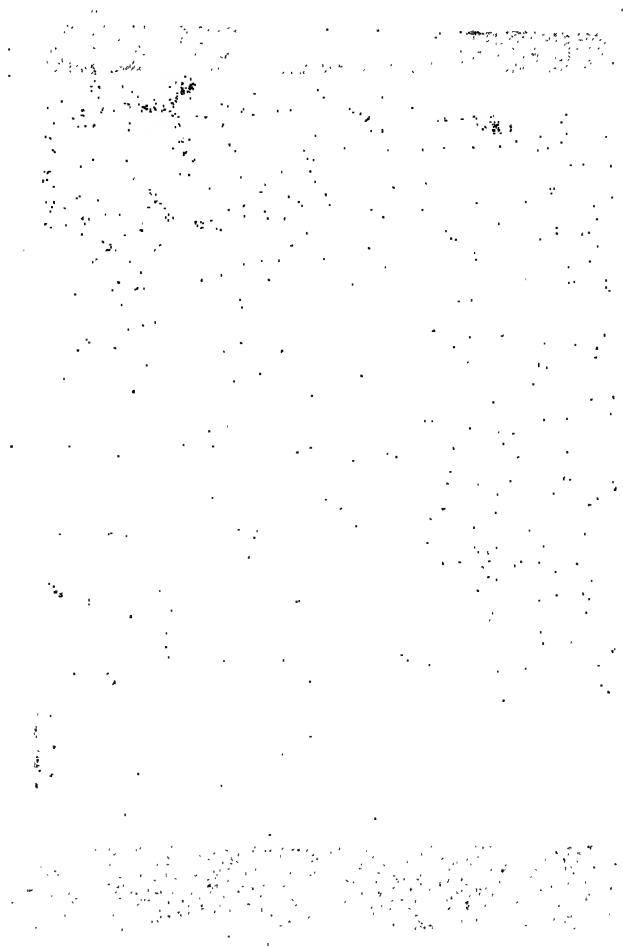


FIG. 28.—GRAVE CIRCLE: STELE II. FROM SECOND SHAFT GRAVE.

No. II. Fig. 28. Measurements: H. (present) 1.13 m. W. .77 m. (base). Th. .14 m. Material, shelly limestone. Found *in situ* above Second Grave.

The top part of this stele is missing, and it is impossible to say how it was

completed. As it exists it is divided into three vertical panels; the middle one is plain but for narrow vertical borders, and may represent a column. The two side panels contain broad flowing bands <sup>1</sup> arranged in vertical meander-like coils and may represent affronted serpents <sup>2</sup> or merely a curvilinear decoration. The whole design is enclosed at the sides by a plain broad band.



FIG. 29.—GRAVE CIRCLE : STELE III.

No. III. Fig. 29. Measurements : H. uncertain. W. .94 m. Th. .13 m. Material, shelly limestone.

The field is divided into four vertical panels, separated by plain bands, the whole enclosed in a plain border. In each panel is a row of vertically linked spirals, with dots on either side at intervals. This use of dots as filling between

<sup>1</sup> For wavy bands on either side of plain vertical bands, cf. the designs on polychrome later M.H. Matt-painted ware, Class B. III. (Blegen, *Korakou*, Fig. 40) : see below, p. 141.

<sup>2</sup> For heraldically opposed serpents, cf. Evans, *Palace of Minos*, i., Fig. 494.

linked spirals is a characteristic feature of the patterns of L.H. I. pottery.<sup>1</sup> It appears on a vase from the Third,<sup>2</sup> and on the gold diadem from the Second Shaft Grave, in each case between linked circles. Its immediate origin is Crete, where perhaps it is a survival of the knobs that adorn the great pithoi, and appears between the medallions in the medallion pithoi.<sup>3</sup>

No. IV. Pl. XX. Measurements: H. 1.86 m. W. 1.02 m. (base). Th. .14 m. Material, shelly limestone. Found *in situ* above Fifth Grave.

Owing to the recovery of another fragment at Mycenae in 1920, this stele is now practically complete. The decorative scheme consists of three registers separated by plain horizontal bands. A double band encloses the whole.

In the upper panel are two horizontal rows of three spirals joined vertically and horizontally;<sup>4</sup> and detached to the right, three smaller spirals joined vertically. In the middle panel a chariot moves rapidly to the right, drawn by a prancing horse. In it a man stands, bending forward and holding the reins in his right hand. To the right of the horse's head stands a man on foot with bent knees, who seems to be pointing a long lance in the direction of the oncoming charioteer, though it is possible that he is represented as being transfixed by the lance. (In No. VIII., a lance-head is seen pointing towards the chariot; while in No. XI., the lance must have been carried by the charioteer, as no adversary is represented.) From the chariot-box an object which looks like a triangular sword seems to fly out behind. Spiral filling may have occupied the upper left-hand corner.

In the lowest panel are two linked circles, the interiors of which are decorated with a motive which appears in cruciform shape on Egyptian sealings of the XIIth dynasty,<sup>5</sup> on a M.M. II. signet seal from Crete, on a sealing from Zakro, on Stele VI. linked with a spiral, as well as on gold buttons from the Third Shaft Grave.<sup>6</sup> Whatever its origin, the Mycenaean have here treated the motive with characteristic grace and originality.

In the space below, which was elsewhere left unsculptured, has been lightly scratched a design, also of Egyptian origin and of the XIIth dynasty, adapted in Crete, where it appears on M.M. I. seal-stones and on a fresco of the M.M. II. palace,<sup>7</sup> and transmitted to Mycenae.<sup>8</sup> A peculiarly elegant variation of the same motive appears in the upper border of Stele VI.

<sup>1</sup> Numerous examples from Korakou, cf. Blegen, *op. cit.*, Figs. 51 (7), 53 (9), 56, and from Mycenae itself.

<sup>2</sup> Furtwängler-Loeschcke, *Myk. Tongefässe*, Pl. IV., 19.

<sup>3</sup> Evans, *op. cit.*, Figs. 175, 409.

<sup>4</sup> See Evans, *Cretan Pictographs*, p. 59, Fig. 50, and the side of a box from the Fifth Shaft Grave, Schliemann, *op. cit.*, Fig. 472: also on a gold cup from the same grave, Schliemann, *op. cit.*, Fig. 476.

<sup>5</sup> Evans, *Cretan Pictographs*, p. 60.

<sup>6</sup> Evans, *Scripta Minoa*, i., p. 141, Figs. 89 (b) and 90; *Palace of Minos*, i., Fig. 523 (c). Cp. also Candia Museum, No. 1024, an ivory cylinder seal from a tholos tomb at Platanos.

<sup>7</sup> Evans, *Palace of Minos*, i., Fig. 150 (e) and Pl. I. (k), p. 231. Also in a naturalistic form as filling on the gold box from Fifth Shaft Grave, Schliemann, *op. cit.*, Fig. 470.

<sup>8</sup> Cf. *Phylakopi*, Pl. XX., 15: it appears also on gold bands from the Fifth Shaft Grave, Schliemann, *op. cit.*, Figs. 514, 517, 518.

No. V. Pl. XX. Measurements: H. 1.33 m. W. 1.06 m. Th. .14 m. Material, shelly limestone. Found *in situ* above Fifth Grave.

In its present condition this stele shews only two registers, separated horizontally by a single, and enclosed on three sides by a double band. From a sketch in Schliemann's notebook the band above the upper register appears to be single, and so there may have been yet one more register above.

The upper register is occupied by the same motive, a network of linked spirals, as in Stele IV. But in the present case there are six vertical rows of spirals and that on the extreme right is not detached.

In the lower panel a chariot, tilted forward, moves to the right, drawn by a galloping horse. The charioteer, whose legs are not visible, and perhaps should be regarded as sitting, holds the reins in his right hand, and a broad, triangular-shaped sword, of which the hilt ends in a large knob, in his left.<sup>1</sup>

To the right, holding the horse's head with one hand and waving a weapon of some kind in the other,<sup>2</sup> a man on foot moves in the same direction. He seems to be a foot soldier accompanying the warrior into battle.

The design is completed by filling decoration. In the upper left hand corner a tailed spiral;<sup>3</sup> above the horse a Mycenaean version of the 'canopied papyrus symbol,'<sup>4</sup> and below, running spirals.<sup>5</sup>

No. VI. Pl. XXI. Measurements: H. (present) 1.06 m. W. .95 m. Th. .15 m. Material, shelly limestone.

As at present constituted, this stele is made up of three fragments and consists of a central panel with borders at each side and above. A plain broad band encloses the whole, while a narrow band separates the central part from the right hand border. This central panel shews three prancing horses, one above the other, of which the drawing closely resembles that of the horses on Stelai IV. and V., except that here the heads are more raised.

Of the side borders, that on the right shews vertically two laterally-joined spirals; above them a spiral with a rosette centre and an ordinary

<sup>1</sup> The character of the sword is not clear. Allowance being made for bad drawing and the exigencies of space, it seems to be of the long triangular type found in the Fourth Shaft Grave (e.g. Schliemann, *op. cit.*, Fig. 446). It may equally well be a dagger of the same type as the inlaid daggers of the Fourth Grave. No emphasis can be laid on the proportions. The sword may be represented as in its sheath.

<sup>2</sup> The nature of this weapon is also doubtful. Cf. the weapons from the Fourth Shaft Grave, which end in a ring, and which Schliemann regarded as long knives; *op. cit.*, p. 279 and Figs. 442, 442 (a).

<sup>3</sup> Perhaps of Egyptian origin, cf. the S-shaped symbols on Cretan prism-shaped seals; Evans, *Cretan Pictographs*, Fig. 20 (a), 23 (c) and Figs. 69 (a), (b). It is a common filling ornament on Middle Cycladic III. pottery, cf. *Phylakopi*, Pls. XIV. 9, XVI. 13, cf. also the sword-hilts from the Fourth Shaft Grave, Schliemann, *op. cit.*, Figs. 428, 430, 431.

<sup>4</sup> Evans, *Cretan Pictographs*, p. 60: this motive is found on the well-known gold objects from the second city at Troy (Schuchhardt, *Schliemann's Excavations*, Figs. 56, 57), and, without the loop, on the gold wire portions of a necklace from the Third Shaft Grave (Schuchhardt, *op. cit.*, Fig. 175).

<sup>5</sup> Running spirals appear as filling motives on Cycladic pottery.

spiral linked together. The spiral with the rosette centre is the same type as that on Stele IV., but the centre is cuneiform. The left border shews two laterally-joined spirals corresponding to the two opposite spirals in the right border, but there appears to be no band separating them from the central panel.

The right hand upper fragment, judging by Schliemann's illustration,<sup>1</sup> does not connect with the right hand fragment now below it, and the junction has been effected with cement. There is also some doubt whether the two lower fragments really join. However, until this stele is taken to pieces, it is impossible to form any opinion, as other fragments, at present unplaced, may perhaps be found to belong to it.

The design in the upper border is, as has been noted above, an elaboration of the motive that is scratched on Stele IV.<sup>2</sup>

No. VII.a. Pl. XXI. H. .35 m. W. .53 m. Th. .12 m. Material, shelly limestone.

The fragment VII.a shews part of an upper and part of a lower register. The usual plain bands separate the registers from one another and both from the border, which consists of a vertical row of spirals joined diagonally. A broad band encloses the whole. The lower register shews the forepart of a horse, the upper is vacant. The drawing of the horse is identical with that on IV. and V. As there are no reins indicated it seems that this is not part of a chariot scene.

In the spiral border the triangular space between the spirals is raised, and, because they shew the same rare feature, fragments VII.b and c are grouped here.

No. VII.b. Pl. XXI. H. .26 m. W. .54 m. Th. .12 m. Material, shelly limestone.

Fragment shewing two spirals, being parts of a border and enclosing band.

No. VII.c. H. .20 m. W. .21 m. Th. .12 m. Material, shelly limestone.

Fragment shewing part of spiral border and enclosing band.

No. VIII.a. Fig. 30. H. .47 m. W. .45 m. Th. .11 m. Material, shelly limestone.

This fragment shews part of a left-hand border, separated from the central field by a plain band, and enclosed by a similar band on the outside. The motive is the flowing band arranged in flattened meander coils.<sup>3</sup>

<sup>1</sup> *Op. cit.*, Fig. 144. This fragment seems to have been found in the ruins of the House of the Warrior Vase. Schliemann in his notebook (Nov. 1, 1876) says, 'In the Cyclopean house . . . there were also found fragments of sculpture representing a horse and a spiral ornamentation.' This is confirmed by the inventory of the National Museum, Athens, which says this stele was found outside the Grave Circle.

<sup>2</sup> It appears in a less elaborate form in Crete at a much earlier period (E.M. III.) on a side-spouted jug from the Kamares Cave (Evans, *Palace of Minos*, i., Fig. 77 (b)), and in the M.M. III. period on painted stucco fragments from Knossos. (Evans, *op. cit.*, Figs. 269, 270).

<sup>3</sup> There are many parallels to the treatment of this motive on the gold objects from the Shaft Graves. Cf. Schliemann, *op. cit.*, Figs. 405, 407; cf. Montelius, *Die Älteren Kulturperioden*, Figs. 264-265 (b) for a Swedish Bronze Age example.



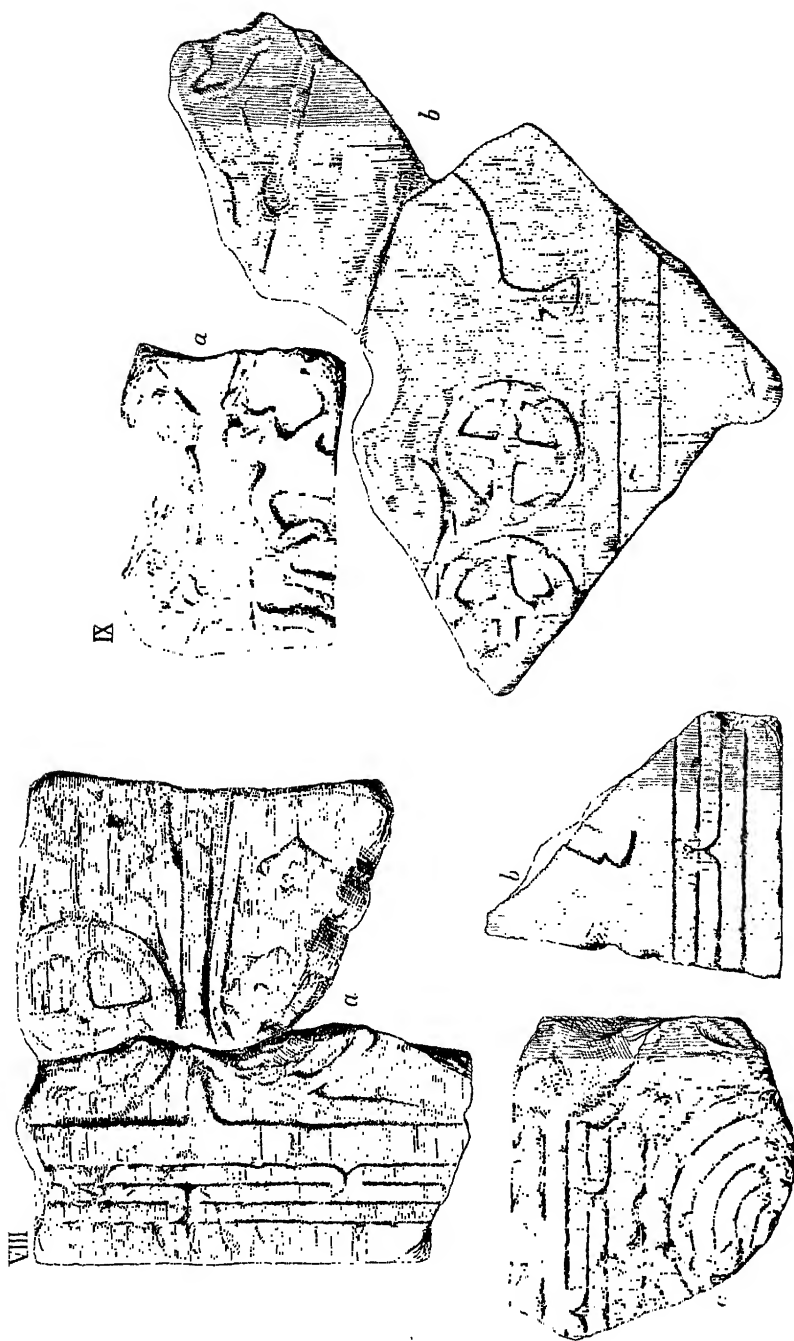


FIG. 30.—GRAVE CIRCLE: STELAE VIII. AND IX. (Scale 1 : 8).

The central portion shews part of an upper and part of a lower register, separated by a plain horizontal band.

In the upper register, to the left, two-thirds of a chariot-wheel, below it, to the right, the head of a spear,<sup>1</sup> pointing to the left and resting on the ground.

In the lower register, heads of two warriors. The one to the left has an arm swung out behind, and seems to be whirling a sling round his head.<sup>2</sup> The heads in this stele differ from those in the others, being more pointed. The profile is like that of the ordinary L.H. III. terracotta figurines and the eye is misplaced. The execution, as well as the drawing, seems coarser than in the other stelai of this class. This may, however, be due to the material, which is softer and crumbles more easily.

Nos. VIII.*b*, VIII.*c*, VIII.*d*.

These fragments are grouped here because the border and the material are the same as in VIII.*a*.

No. VIII.*b*. Fig. 30. H. .30 m. W. .24 m. Th. .11 m.

Shews the hoof and part of the leg of a horse.

No. VIII.*c*. Fig. 30. H. .27 m. W. .30 m. Th. .11 m.

Left-hand corner with part of a spiral.

No. VIII.*d*.

Shews part of border.

Nos. IX.*a*, IX.*b*. Material, shelly limestone. These two fragments are classed together conjecturally.

No. IX.*a*. Fig. 30. H. .23 m. W. .32 m. Th. .11 m.

This shews the lower rim of a wheel (?) and below it to the left the legs of a man, falling head foremost; to the right the head and upper part of a man who is leaning forward to the right. One arm is stretched out behind and the other to the front. The object to the right of his head is perhaps the point of a spear or sword held by an adversary, as in the gold ring from the Fourth Shaft Grave,<sup>3</sup> or even his arm.<sup>4</sup>

No. IX.*b*. Fig. 30. H. .32 m. W. .42 m. Th. .12 m.

Below, a main double horizontal band such as appears below the decorated area in IV. and V. Above it, to the left, part of curved chariot box and two wheels, one not quite complete. To the right the hind-quarters of a horse, of the same type as in IV. and V. Above, part of the reins, and above them what looks like a man who has fallen forward and supports himself with his right arm. A car with four wheels is unique in Mycenaean and Minoan art. Perhaps two chariots are intended. If so, the box of the leading chariot is tilted forward

<sup>1</sup> The spear seems to be of the type found in the Fourth Shaft Grave.

<sup>2</sup> This object seems to pass in a continuous curve from the man's hand over his head and out in front. Cf. the slingers on the silver rhyton from the Fourth Shaft Grave (Stais, *Ath. Mitt.* 1915, Pls. VII., VIII.), where, however, the sling is much shorter and the action quite different.

<sup>3</sup> Schliemann, *op. cit.*, Fig. 335.

<sup>4</sup> Cf. a serpentine seal-stone at Berlin, illustrated by Bossert, *Altkreta*, 251 (*b*).

in conformity with the spokes, which are at a different angle from those of the wheel behind.

X.a, X.b. Fig. 31. Material, poros.

X.a.<sup>1</sup> H. .33 m. W. .28 m. Th. .16 m.

Part of a right-hand plain double band. In the field a standing figure with bent knees, holding his right hand in front of his breast, and grasping in the left a curved object. The hair is indicated by two lines running parallel with the line of the head. The upper one has a row of minute vertical notches.

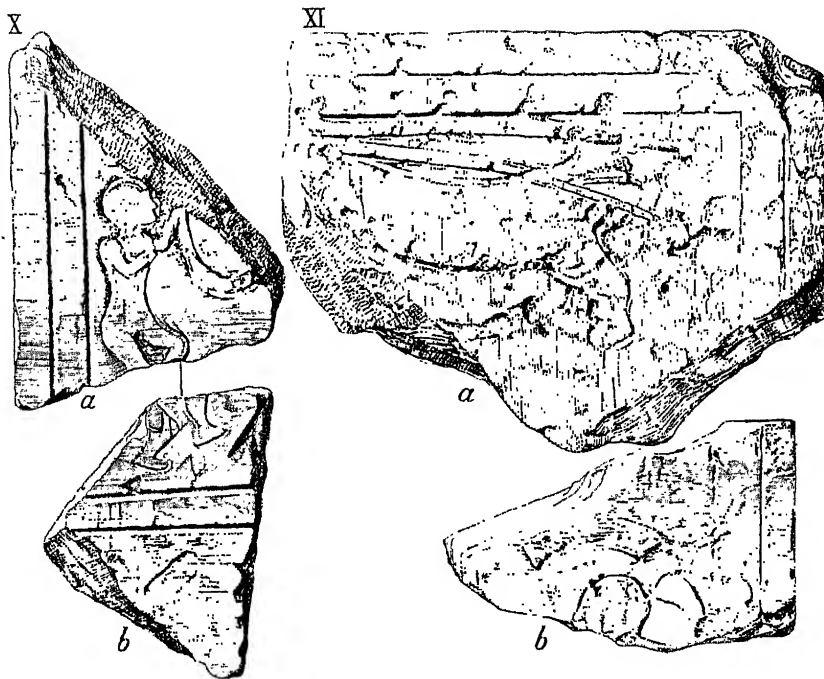


FIG. 31.—GRAVE CIRCLE: STELAI X. AND XI. (Scale 1 : 8.)

X.b. H. .29 m. W. .20 m. Th. .16 m.

Part of a plain single horizontal band. Above, the lower part of a man's legs, who seems to be running. The field below the band is unsculptured.

These two fragments are classed together, as the material, style, and workmanship closely correspond. The material is soft limestone (poros) like Stele I., and the execution resembles incision rather than sculpture. The drawing is a good deal more primitive than on the stelai hitherto described, and the out-

<sup>1</sup> Probably also found in the ruins of the House of the Warrior Vase. Schliemann in his notebook (Nov. 1, 1876) says: 'In the Cyclopean house we found a fragment of an archaic bas-relief representing a man who is much like that one who holds the horns of the mysterious animal in the other sculpture. He is also naked and holds a line in his hand.'

lines shew much uncertainty. The human types, too, on this and XI., even when allowance has been made for want of skill, have a negroid appearance, not unlike those on fragments of faience plaques from Knossos.<sup>1</sup> This, taken in conjunction with the exotic-looking curved object (which appears also on XI.*b* below), which must be a throwing-stick or a horn, may perhaps indicate that on these two stelai and on the silver rhyton, the scenes are laid outside Greece.<sup>2</sup> This impression is confirmed by the two parallel lines on the man's head, one of which has notched markings to indicate plaited hair or some kind of cap. In any case, the primitive appearance of these Stelai, X. and XI., justifies the assumption that they are the earliest.

XI.*a*, XI.*b*. Material, poros.

These two fragments resemble those of No. X. in material and in style. The double band, however, which encloses the scenes is wider and much less deeply incised than in No. X. It is probable therefore that X. and XI. are parts of separate stelai.

XI.*a*. Fig. 31. H. .42 m. W. .535 m. Th. .16 m.

Shews the right-hand top corner. A plain double band encloses the field, which shews the forepart of a horse. That a chariot scene was represented is shewn by the reins, and by a long lance which appears above, pointing in the same direction as the horse is going. The surface is much defaced and the horse's head almost indistinguishable. Two parallel lines along the neck may indicate the mane.

XI.*b*. Fig. 31. H. .23 m. W. .33 m. Th. .16 m.

Shews part of a similar right-hand band, and within it the head and arm of a man who faces left and seems to brandish the same kind of curved object as appears on X.*a*. The man's head is even more primitively drawn, but has a markedly negroid appearance.

XII. *a-k*. The remaining fragments, grouped under XII., are all unplaced. They are all of the same style and material (shelly limestone) as those already considered (except I. and XI.), and may well be parts of them. All shew parts of spirals or plain borders.

XII.*a*. Fig. 32. H. (?) .42 m. W. (?) .40 m. Th. .11 m.

A much defaced fragment with double outer band above, enclosing an intricate and beautiful development of the motive which appears at the bottom of Stele IV., and, as filling decoration, on Stele V. In its present elaborated form (Fig. 32, *a.a*) it appears on a stone vase of Cycladic shape from Kythera.<sup>3</sup>

XII.*b*. Fig. 32. H. (?) .40 m. W. (?) .31 m. Th. .11 m.

Upper corner of stele shewing plain outside band, enclosing spiral and loop. For spiral-form patterns ending in loops, cf. Evans, *Palace of Minos*, i., Fig. 148.

XII.*c*. Fig. 32. H. (?) .26 m. W. (?) .39 m. Th. .16 m.

<sup>1</sup> Evans, *Palace of Minos*, i., Fig. 230 (*a*) and (*b*).

<sup>2</sup> Evans, *op. cit.*, pp. 311, 312.

<sup>3</sup> *Ἀρχ. Δελτίον*, i., p. 192, Fig. 1; Athens, Nat. Mus., 6231.

Parts of three linked spirals, forming a border. The relief is slighter than in the others.

XII.d. Fig. 32. H. .30 m. W. .21 m. Th. .12 m.

Greater part of one spiral, slightly flattened, and small part of another. They are linked laterally, not diagonally, compare a similar pair in No. VI.

XII.e. Fig. 32. H. (?) .23 m. W. (?) .43 m. Th. .14 m.

Fragment shewing part of spiral border with a broad vertical band on the outside and a narrow band separating it from the field. The spirals are linked laterally. In the field part of an indistinguishable object.

XII.f. Small fragment, shewing angle of horizontal and vertical band.

XII.g. Fragment, much defaced. Traces of spiral border and double enclosing band.

XII.h. Triangular fragment, shewing traces of spiral and framing band.

XII.i. Triangular fragment, much defaced, shewing part of spiral.

XII.j, k, l. Three defaced fragments. No designs distinguishable.

#### STYLE AND TECHNIQUE.

From the point of view of style and execution, the stelai may be arranged in three classes.

##### *Class I.*

In the first class may be placed the fragments that make up X. and XI. Differing in material from all the others except No. I., and representing a far lower level of execution, they seem to stand by themselves, and may reasonably be regarded as the earliest.

##### *Class II.*

Class II. contains all the rest (including the unplaced fragments XII.a-k) except No. I. In technique and style they form a homogeneous group. The same contrast between the finished and skilfully drawn decorative parts and the awkwardly drawn figures is apparent in all.<sup>1</sup> Spiral motives appear on all except II. and VIII., both of which have variations of the meander or flowing band. All the motives, whether spiral or meander, find parallels on objects from the Shaft Graves.

The technique is excellent throughout. In spite of the clumsy drawing and absence of modelling, the figures are clearly cut to a uniform depth, while the background is even and regular. The drawing of the horses in Nos. IV., V., VI., VII. and IX. is so similar that it is tempting to regard them as the work of the same hand. The group as a whole

<sup>1</sup> II., III. and XII. have decorative schemes only.



FIG. 32.—GRAVE CIRCLE: FRAGMENTS OF GRAVE STELAI. (Scale 1 : 8).  
*a.a.*, SHEWS RESTORED DESIGN OF *a*.

gives the impression of being the work of a sculptor, or sculptors, who were highly trained in the art of carving, or of inlay or metal work. The backgrounds of the figure scenes look almost as if they were prepared to receive inlay of some precious metal. The material of all is the same—shelly limestone.

The stylistic characteristics of this class are :—

- (i) The geometrical treatment of spiral, meander and rosette motives.
- (ii) The spacing of the field into horizontal or vertical panels, the whole sculptured portion being invariably enclosed in a single or double band.
- (iii) Geometrically drawn figures, mostly moving to the right.<sup>1</sup>

With regard to the first characteristic, an identical treatment of spiral, meander and rosette motives appears, as has often been noted, on many of the gold objects from the Shaft Graves. In the case of the stelai the motives take for the most part the form of borders or panels, whereas on the gold objects they appear often isolated, *e.g.* on the gold buttons. But there is evidently a close relationship between the decorative elements as they appear on the stelai and as they appear on the Shaft Grave objects. And as these objects are distributed over all the Shaft Graves, except the Sixth, it would be a legitimate conclusion that the stelai of this class were originally distributed over all the other graves.

Is it possible to fix their distribution more exactly?

A consideration of the second stylistic characteristic seems to provide a chronological index of some importance in this connection.

The feature which distinguishes the decoration of later Middle Helladic Matt-painted pottery from that of the Cyclades on the one hand, and from the contemporary wares of Crete on the other, is the persistence of the geometric tradition. Long after the naturalistic impulse from Crete had profoundly affected the art of the Cyclades, the vase painters of the mainland were dividing the surface of their vases into vertical and horizontal compartments in the earlier manner. Especially on the polychrome Matt-painted vases is this the case (Class B. III.). Examples abound from Korakou<sup>2</sup> and Mycenae.<sup>3</sup> In the Sixth Shaft Grave a typical amphora was found, the shoulders of which are divided into

<sup>1</sup> This does not apply to II., III. or XII.

<sup>2</sup> See Blegen, *Korakou*, p. 28.

<sup>3</sup> Furtwängler-Loeschcke, *Myk. Tongefässe*, Pls. VIII.-X.

panels, while a horizontal band round the middle divides the surface into two registers.<sup>1</sup> The decorative scheme of the stelai of this class is in close relationship with this tradition. Nos. IV., V., VII., VIII. and IX. all shew a division of the field into panels or registers, separated by a horizontal band, each panel, as on the vases, being enclosed in a vertical border. Nos. II., III. and VI. shew vertical panels.

The second, therefore, of the stylistic features noted above, seems to associate this group of stelai chronologically with the later Matt-painted vases of the mainland.

The importance of this is clear. Though the spiral and meander decoration, by itself, would permit the distribution of this group of stelai over the whole series of the Shaft Graves, which, we know from other evidence, extended to the end of the first L.H. period, this second characteristic is seen to limit their distribution to the intermediate graves, the Second, Fourth and Fifth; for the closing stage of Matt-painted pottery cannot be put later than the first half of the first L.H. period.

A consideration of the third stylistic characteristic of the stelai of this group seems to confirm this conclusion. This is a geometrical drawing of human and animal forms, moving to the right. A fondness for representing these forms, almost invariably turned to the right, is very marked on Cycladic Matt-painted pottery, both in its earlier and later stages. Originally severely geometrical, these forms came to be treated in the naturalistic manner, under Cretan influence. On the mainland they appear only on the polychrome ware, and with only very slight traces of naturalism.<sup>2</sup> In this connection a comparison of the bird on a vase from the Sixth Shaft Grave with a bird on a similar vase from Phylakopi, is instructive,<sup>3</sup> shewing how the Mycenaeans interpreted the Cycladic motive. Similarly, the griffin vases from Mycenae illustrate a rather awkward adaptation of a form derived from Crete through the Cyclades.<sup>4</sup> The artistic affinity between such vases and the stelai of Class II. is apparent.

It remains to consider the design on No. III. How the upper part was completed, it is impossible to say, but, as it exists, this motive (wavy

<sup>1</sup> Other examples from Mycenae are figured by Evans, *Palace of Minos*, i., Fig. 406, *a, b*, and there are several similar fragments in the Athens and Nauplia Museums.

<sup>2</sup> No human forms have been so far found on the mainland.

<sup>3</sup> Cf. Evans, *Palace of Minos*, i., Fig. 405.

<sup>4</sup> Evans, *op. cit.*, Figs. 406, 533-535.



bands on either side of a broad vertical band) appears on an earlier Matt-painted fragment from Phylakopi,<sup>1</sup> and is the most characteristic of all patterns of polychrome Matt-painted ware of the mainland, being found at Korakou,<sup>2</sup> and, in abundance, at Mycenae. A fragment said to be from the Fourth Shaft Grave<sup>3</sup> shews a slight variation of the motive.

The appearance of this design on the stele supplies corroborative evidence of the close connection between this class and the artistic tradition of later Matt-painted pottery.

A further affinity with Matt-painted pottery (in this case Cycladic) is indicated by certain details in the figure scene on Stele No. V., viz. the use of filling ornament in association with animal forms, and the distortion of some part of the animal (in this case the horse's tail) to fill a vacant space. Both these devices are found in Matt-painted pottery of the Cyclades. Examples of the first are *Phylakopi*, Pl. XI. (5), XII. (21), (29), the last shewing a spiral filling below the belly of a quadruped moving to the right and thus affording a close analogy to the stele, and XIV., 6 (b), 6 (c) and 9. XII. (30) shews a filling motive similar to that above the horse in the stele, but not associated with an animal form.

Examples of the second device are *Phylakopi*, XI. (2), (5), XII. (27), where, in each case, the beaks of the birds have been exaggerated to take the place of filling ornament.<sup>4</sup> On the stele, the tail of the horse is similarly distorted to take the place of a spiral.

The conclusion is that, while the chronological limits of this class is fixed by the elaborate spiral and meander system to the first L.H. period (the 'great period of the spiral'), the close relationship of their other characteristic elements to Matt-painted pottery, and particularly its latest stage, narrows those limits to the first half of the period, and consequently to those graves which are intermediate between the Sixth, the earliest, and the First and Third, the latest of the series.

The position of those stelai of this group which were found *in situ* is consistent with this attribution, No. II. being found over the Second Grave, Nos. IV. and V. over the Fifth Grave.

<sup>1</sup> *Phylakopi*, Pl. XIII. 7.

<sup>2</sup> Blegen, *Korakou*, Fig. 40.

<sup>3</sup> Furtwängler-Loeschcke, *Myk. Tongefässe*, Pl. V. 20.

<sup>4</sup> XI. (5) may, of course, represent a bird picking a worm out of the ground, as Edgar suggests.

*Class III.*

Stele No. I. stands in a class by itself. In material it resembles the fragments of Class I., in style it is a compromise between the geometrical tradition of Class II. and the naturalistic manner of Crete. The enclosing border is paralleled on gold objects from the Shaft Graves, but the division into horizontal or vertical panels is here abandoned, and the figures of the scenes range untrammelled over the field. Its Cretan affinity is emphasised by the conventional rock scenery.

The attempt to pass from the stiff, geometrical style to a freer and more naturalistic, has resulted in a certain hesitation and uncertainty in the drawing, and the technique is less sure than that of the stelai of the preceding class, but there is already something of the *élan* and feeling for movement which characterise the chariot scene on the gold ring from the Fourth Shaft Grave.

This stele seems accordingly to come at the end of a series, and to indicate a definite break with the older tradition.

It was found standing, along with IV. and V., over the Fifth Grave. Its position is accordingly quite consistent with its stylistic character, the Fifth Shaft Grave being considered on other grounds to come at the end of the intermediate series.

## THE UNSCULPTURED STELAI.

Of the unsculptured stelai, one was found standing over the Second or Fourth <sup>1</sup> Grave, two over the First Grave and two over the Third Grave. Schuchhardt <sup>2</sup> supposed that they represented interments of women. Perhaps, however, at the time when the grave circle was levelled, some of the original stelai were missing, and some too defaced and broken, so that unsculptured slabs were erected in their place. This would explain why unsculptured stelai were found over the First and Third Graves, for which, if the suggested attribution is correct, no sculptured stelai exist.<sup>3</sup>

<sup>1</sup> According to Schuchhardt, Schliemann assigns it to the Fourth Grave.

<sup>2</sup> *Schliemann's Excavations*, p. 168.

<sup>3</sup> Reichel suggests that the stelai were once covered with stucco and painted. This would have hidden the rough background of Stele I. and also perhaps have smoothed over the heavy forms on the other stelai. None, however, shew any traces of ever having been covered with stucco or painted. The one sculptured stele ('Εφ. 'Αρχ. 1896, Pls. I., II.) from Mycenae which is coated with stucco and painted, is a palimpsest and shews in the relief a

## GENERAL CONCLUSIONS.

*Distribution of the Stelai.*

In view of the above consideration, the following distribution of the stelai is possible :

Nos. X. and XI. stood over the Sixth Grave, the earliest,<sup>1</sup> which contained the bodies of two men, the remainder were distributed over the Second, Fourth and Fifth Graves.

The eleven sculptured stelai represent the eleven interments of these graves, the unsculptured stele which was found standing over the Second (or Fourth) Grave having been put up to replace a broken original.

Of the First and Third Graves, the sculptured stelai, if they existed, have not been identified.

*Relationship to Mycenaean Art.*

What is the relationship of the stelai to Mycenaean art as a whole? In considering their artistic elements, it has been already noticed that in the case of Class II., the panel system of arranging the field, the geometric style of figure-drawing, as well as certain minor details, attach the stelai of this class to the same artistic tradition that produced the decoration of polychrome Matt-painted vases, and it was noted that this tradition persisted longer on the mainland than in the Cyclades.<sup>2</sup>

The decorative parts, on the other hand, of the stelai of both Class II. and Class III. shew a very close contact with Crete. All the motives, in fact, appear in Crete at an earlier date, where 'their antecedent stages can be traced back to an immemorial past.' It is not here to the purpose to attempt to trace the origins or history of that spiral system which was diffused at a far earlier period throughout the Aegean. In the present

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representation totally different from that shewn in painting on the stucco covering. The unsculptured stelai may have been coated with stucco and painted, though no trace of this is now discernible. This would mean that the grave stelai could be ornamented in two ways, (i) by sculpture in relief, (ii) by covering an unsculptured surface with stucco on which a scene was then painted.

<sup>1</sup> Tsountas and Manatt (*Myc. Age*, p. 91) say that an unsculptured stele was found over Grave VI. by Stamatakes.

<sup>2</sup> A possible contributory source of inspiration must not be overlooked in Cretan seal impressions of M.M. III. times, which shew human and animal figures with a dado underneath, themselves echoes of frescoes, cf. Evans, *Palace of Minos*, i., Fig. 504 (a), (b), p. 694 and Figs. 515, 516.

case the immediate origin of these motives must have been Crete, but, in adopting them, the Mycenaeans have enriched and elaborated them. Two examples will suffice. The rosette motive in the lowest panel of Stele IV. can be traced back, in a simpler form, through Crete to the XIIth dynasty Egypt.<sup>1</sup> In the Mycenaean version six spirals instead of eight give a more graceful and varied character to the motive, while the juxtaposition and interlacing of the two rosettes makes a novel design, which is, moreover, perfectly adapted to the space to be filled. So the top border of No. VI. is found on a fresco border of M.M. II. times at Knossos, but, in the process of adoption, it has been enriched and diversified by the Mycenaean artist.<sup>2</sup>

Had the stelai shewn these motives alone, the conclusion would have been that they were the work of Cretan artists, but since they are found in conjunction with the figure scenes, which are entirely un-Cretan, and could not conceivably have been produced by a Cretan artist, the inference is that both parts are the work of Mycenaeans, unless indeed we suppose that Cretan artists produced the spirals, etc., and local artists the figure scenes.

But the appearance of the two styles simultaneously on the same stelai is not so remarkable, if it is remembered that the Matt-painted vases appear in the Shaft Graves side by side with gold buttons, etc., which seem to be local products made under Cretan influence, and with objects like the gold rings which might possibly have been imported.

It is indeed clear that during the first half of the first L.H. period, three distinct artistic currents existed side by side at Mycenae, the Helladic proper which includes the makers of Matt-painted pottery and Minyan goblets, the Creto-Mycenaean represented by the potters and metal-workers, working under Cretan teachers, and the Minoan, which is represented by the numerous objects either made by Cretans at Mycenae or imported from Crete.

The sculptors (who were perhaps the same as the gold-workers experimenting in a new material) could execute the spirals, etc., well enough, but, lacking the models or the courage, fell back upon native tradition for the figure-scenes.

It is thus, as a record of a short episode in the art of the mainland,

<sup>1</sup> See Καββαδίας, *Προϊστορική Ἀρχαιολογία*, Fig. 213, for an example from Troy, 5th city.

<sup>2</sup> See p. 131, Note 7.

at the moment before the temporary fusion between Cretan and Mycenaean art was complete; as a record of an experiment in a branch of art hardly practised in neighbouring lands (*i.e.* the art of sculpture in stone, as such, as distinguished from the carving of stone vessels and the like), that the stelai have a unique interest and importance.

By virtue of this experiment—the application of a decorative system, half-traditional, half-borrowed, to a new material and for a new purpose—the stelai confirm the impression which many of the gold objects from the graves and the polychrome Matt-painted vases produce, viz. the independent character of Mycenaean art. In the succeeding period, when the minor arts suffered a temporary eclipse, this independence was directed into a fresh channel. Even when Cretan art was becoming paramount at Mycenae, and almost before the last Shaft Graves were finally closed, the earlier tholos tombs were rising, and though the stelai, as such, have no successors, the architectonic genius which they foreshadow was to find, at a later period, its full expression in the Lion Gate and the great tholos tombs of the third group, and in the application of sculpture to their façades. Perhaps a reflection of the same spirit may be seen in the Palace Style of Crete.

W. A. HEURTLEY.

## EXCAVATIONS AT MYCENAE.

### § VIII.—THE PALACE.

(PLATES II., XXII.—XLIII.)

#### I. INTRODUCTION.

THE Palace at Mycenae was first found and excavated by Tsountas in 1886, although Schliemann had previously in 1874 dug one or two trial pits on the summit of the Acropolis here. His shafts are shewn on Steffen's excellent plan.<sup>1</sup> Tsountas published a full report of his excavations in the *Πρακτικά*,<sup>2</sup> and in succeeding campaigns cleared more of the ruins of the Palace,<sup>3</sup> and also laid bare the foundations of the Doric temple which was built over the ruins of the Palace in later times. Unfortunately, no full account or plan of these supplementary excavations has ever been published, so that our knowledge of the Palace at Mycenae was incomplete. In 1914 Dr. Rodenwaldt re-examined the painted stucco floors in the Court and in the Megaron,<sup>4</sup> and at the same time republished, together with important new fragments which he was lucky enough to find, all the known pieces of wall-painting from the Megaron.<sup>5</sup> We began work on the Palace in 1920, and continued our re-investigation of the ruins during the three following campaigns, of which that of 1923 was very short. The results of our observations and the few new points discovered by us are here set out. We have to thank Dr. Leicester Holland for the splendid plan published here (Plate II.). In it all the foundation walls of the Doric temple are omitted and most of the Hellenistic and other late walls, so as not to confuse the plan of the Mycenaean Palace. Where any Greek walls have had to be indicated, such are shewn in a summary manner by

<sup>1</sup> *Karten von Mykenai*, Pl. II.

<sup>2</sup> *Πρακτικά*, 1886, pp. 59 ff.

<sup>3</sup> *Ibid.*, 1888, p. 29.

<sup>4</sup> *Jahrbuch*, 1919, pp. 87 ff.

<sup>5</sup> *Der Fries des Megarons von Mykenai*.

dotted lines only. The sections and reconstructions seen in Pls. XXIV., XL., and Figs. 34, 37, 38 are the work of Mr. De Jong.<sup>1</sup>

We have already pointed out<sup>2</sup> that the roadway, which ascends the Great Ramp on the east of the Grave Circle, cannot be followed once it reaches the head of the Ramp. It cannot have continued due south because there was nothing to carry it above the sharply sloping rock. Like the road which comes up the corresponding ramp at Tiryns, it probably turned at right angles eastwards at the head of the Ramp, and then gradually climbed the slope of the acropolis in a south-easterly direction to the south side of the Palace.

In 1895 Tsountas discovered<sup>3</sup> the upper part of this roadway, and traced it to just below the Grand Staircase which ascends to the Court of the Palace from the south. The road is supported by a massive retaining wall built in the Cyclopean style, and though it is clear that its general line is that of the east side of the Great Ramp, yet the intervening area between the head of the Ramp and the point where Tsountas picked it up again has been destroyed by Hellenistic houses. Tsountas' investigations thus proved that the road continued beyond the Ramp leading slantwise up the hillside towards the foot of the Grand Staircase. The road does not actually approach the entrance to the staircase, but passes some little distance below it. Probably it ran past the entrance at a lower level, and then turned back and reached the level of the entrance by a series of zigzags. This cannot now be ascertained, as the space between the entrance to the staircase (65)<sup>4</sup> and the road below has been disturbed and built over in archaic Greek and in Hellenistic times. Just to the south-west of the entrance to the Staircase (65) there is a heavy retaining wall (64) which is clearly originally of Mycenaean construction. This runs at an oblique angle to the entrance, but comes close to the outside corner of the West Lobby (63), which it supports. It is further to be noticed that by the angle of the West Lobby it has a

<sup>1</sup> The account of the architectural remains and the pottery is the work of Mr. Wace, who was assisted throughout in his observations by Dr. Holland and Dr. Blegen. The frescoes are described by Miss Lamb, who was in principal charge of the operations in the Palace in 1921, but she has assisted in many other ways as well. Dr. Boethius too took an active part in the examination of the Pithos Area, Pillar Basement, and North-Western Propylon. Other members of the School, notably Mr. A. W. Gomme, have helped in the work on which this report is based.

<sup>2</sup> See pp. 67 ff., above.

<sup>3</sup> *Πρακτικά*, 1895, p. 24; 1896, p. 29.

<sup>4</sup> The figures in heavy type refer to the Plan, Pl. II.

set-back so as to bring it yet nearer to the wall of the lobby. On the other hand, in front of the entrance (65) it runs away south-eastwards at such an angle as to leave a wide space there. This wall (64) would thus mark the end of the roadway leading up from the Great Ramp.

## 2. THE STAIRCASE.

The actual entrance (65) to the Grand Staircase passes between big blocks of dressed poros,<sup>1</sup> which were once the base for wooden beams let into an ashlar wall, as can be clearly seen by the dowel-holes on their upper surfaces. As shewn by the central bosses on the two blocks to the left of the entrance, the wooden beams were laid along the edges of the blocks and also tied by cross-beams running between the bosses. The wooden beams at the sides of the doorway also served to hold the door-frame in place. The threshold is missing.

## THE WEST LOBBY.

The West Lobby (63), which one now enters, is floored with a layer of hard cement. Along the western and northern walls ran a low bench (.45-.50 m. high, .50 m. wide) of limestone blocks covered with stucco. The bench was a later addition, because, as can be very clearly seen in the north-west corner, it is laid over the cement floor. In the stonework of the bench, in the actual corner of the walls, and just above the cement floor, we found some broken pottery, all of which, with one or two exceptions, are unmistakably of L.H. III. date. Among them unpainted one-handled kylikes (Fig. 33 *a*) were common. On the cement floor of this lobby we found a fair amount of L.H. III. pottery, including kylikes (painted and unpainted), deep bowls and mugs. Miscellaneous finds comprise one steatite and one clay whorl of the ordinary conical type, a bone bead shaped like a small washer, and a piece of worked limestone .035 m. long and triangular in section, which was probably part of some inlaid work. We also sank a pit below the floor of the lobby at a point where the cement had perished, with the following result. The cement floor is laid over a well-packed layer of earth from .45 to .50 m. thick, below which is a heavy fill of rough limestone blocks

<sup>1</sup> For the difference between 'limestone' and 'poros' see *A.J.A.*, 1923, p. 445.



running down to the rock, which is at a depth of 2 m. (or at a level of 63.92) below the floor (cf. Pl. XXIV.).

Our first layer, from 65.92 to 65.72, gave us :

Middle Helladic, Minyan (Yellow Minyan and plain polished ware), twenty-nine sherds: some of the Yellow Minyan and polished ware is probably L.H. I. in date.

Matt-painted, Group B.I., seven sherds.

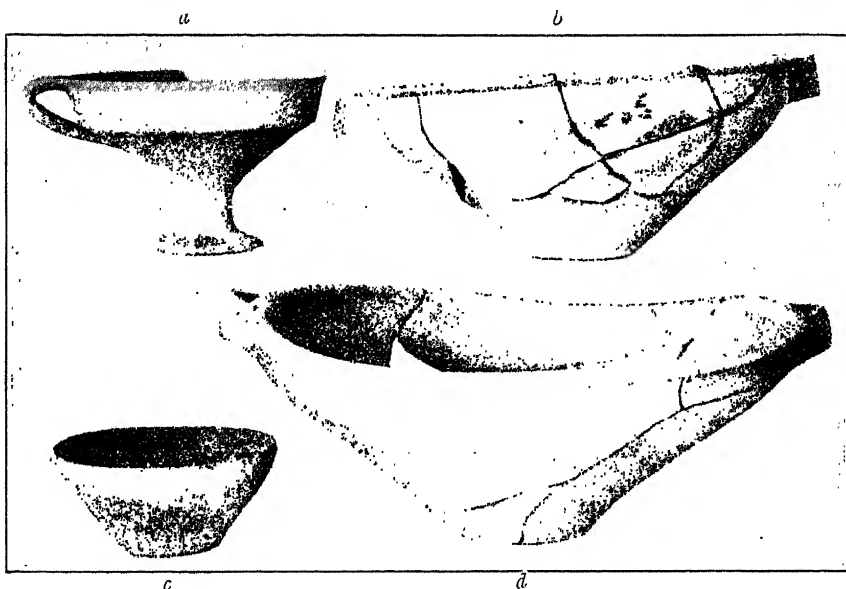


FIG. 33.—KYLIX (a) FROM WEST LOBBY OF GRAND STAIRCASE; BOWLS (b, d), HANDLELESS CUP (c) FROM ROOM NORTH OF WESTERN PORTAL. (Scale 1:4.)

Late Helladic I., six sherds, including the fine pieces with a large double-axe-pattern on a spotted ground (Pl. XXXI. *q-s*).

Late Helladic III., fragment of unpainted kylix.

The second layer, 65.72 to 65.47, yielded :

Early Helladic, one sherd.

Middle Helladic, Minyan, four sherds.

Matt-painted, Group B.I., five pieces.

Yellow Minyan and plain polished ware (some of which is L.H. I.), twenty-two sherds.

Late Helladic I., painted, one piece.

Handleless cups, five fragments. This type of cup is illustrated in Fig. 33 *c*, and is extremely common in all the deposits below the

floors of the Palace. As has been mentioned already,<sup>1</sup> this type of handleless cup, showing all the signs of the quick wheel and with pronounced string-marks on the base showing how it had been cut off from the wheel, and at the same time with strongly marked ribs on the sides caused by the pressure of the finger while the clay was turning on the wheel, seems to be very characteristic of L.H. I.-II. deposits. They occur in L.H. I.-II. strata at Korakou,<sup>2</sup> and one was found with the earliest group of interments in Tomb 517, which were accompanied by nothing that could be dated definitely as later than L.H. II. At Knossos and other Cretan sites cups of this shape are extremely common<sup>3</sup> at the end of the Middle Minoan Period and in L.M. I.-II.<sup>4</sup> Here too below the floor of this lobby we find them with L.H. I. sherds. On the other hand, in tombs which contain typical L.H. III. pottery, cups of this type are as rare as they are common in the earlier period. For instance, in the deposits of the early strata by the Lion Gate, cups of this type hardly occur.<sup>5</sup> This type of handleless cup begins at Mycenae in L.H. I., was common throughout L.H. II. and died out at the beginning of L.H. III., and can therefore be used as valuable evidence in dating deposits when painted pottery is lacking.

Coarse ware, four pieces.

The third layer through the stone-fill down to the rock (65.47 to 63.92) yielded :

Early Helladic, two sherds.

Middle Helladic, Matt-painted, Group B. I., six sherds

Matt-painted, Group D. I., light-on-dark, one piece.

Plain and polished ware, twenty-four sherds.

Late Helladic I., six sherds.

Handleless cups, one piece.

Coarse domestic ware, four fragments.

Another test gave us similar results.

The conclusion that this part of the Grand Staircase is built on a vast mass of stone-fill thrown in on the native rock is confirmed by the evidence obtained below the floors of the Central and East Lobbies (66, 67), but when the fill was put down we cannot define with any certainty. It is at least sure that it must have been put in not earlier than the end of L.H. I., otherwise L.H. I. pottery would not be found

<sup>1</sup> *B.S.A.* xxiv. p. 208.

<sup>2</sup> Blegen, *Korakou*, Fig. 81.

<sup>3</sup> Evans, *Palace of Minos*, I. p. 570, Fig. 415A, p. 588 ff.

<sup>4</sup> Cf. *B.S.A.* vii. p. 75; x. p. 8.

<sup>5</sup> See pp. 20 ff. above. One was found in Tomb 521, which is early L.H. III.

stratified in it. On the other hand, the presence of L.H. III. pottery in the bench shows that the Grand Staircase took its final form in L.H. III.; and one small piece of evidence from the Central Lobby confirms this.<sup>1</sup> Thus we can say that a staircase may have been built early in L.H. II. when the stone-fill was thrown in, and then remodelled in L.H. III. times. Of course, the stone-fill when first put in may have been intended to serve as a terrace for some other building and not for the Grand Staircase, which was first built here in L.H. III. Or we could say that the whole was built in L.H. III. times, and that the presence of L.H. I. pottery below the floor and in the fill is due to the fact that during the levelling operations the builders dug into deposits of that period for their fill. From the evidence so far before us the first view seems the more reasonable, but we shall have to review it when we have considered the evidence of the Pithos Area (62) and of the Pillar Basement (61).

This West Lobby (63) is of rather curious shape, consisting of a small and a large rectangle side by side. The entrance leads directly into the smaller rectangle, and then turns to the left into the larger rectangle to reach the actual bottom of the stairs. The lowest steps are separated from the small rectangle or entrance proper by a low balustrade which was probably open, so that from the entrance one could look straight through to the stairs (Pl. XXII. *a*, Fig. 34). At the west end of this balustrade wall is a large block of dressed poros, and another similar block is set in the wall of the balustrade, just by the side of the sixth step of the stairs, which is wider than any of the others. The block by the sixth step, to judge by the dowel-holes, probably held the wooden uprights for the anta at the end of the supporting wall of the staircase. The western poros block probably supported either a round wooden column as in the Knossos staircase,<sup>2</sup> or else formed the base of a square rubble pier bound with vertical wooden posts at the angles to carry the roof-beams above.

In the west wall there is a row of large ashlar blocks of poros with dowel-holes in the upper edges. These should have carried horizontal wooden beams, with most probably a window above them to light the lower flight of the staircase (see the restored plan, Fig. 34).

<sup>1</sup> See below, p. 154.

<sup>2</sup> Evans, *Palace of Minos*, i. pp. 325 ff., Figs. 237-247.

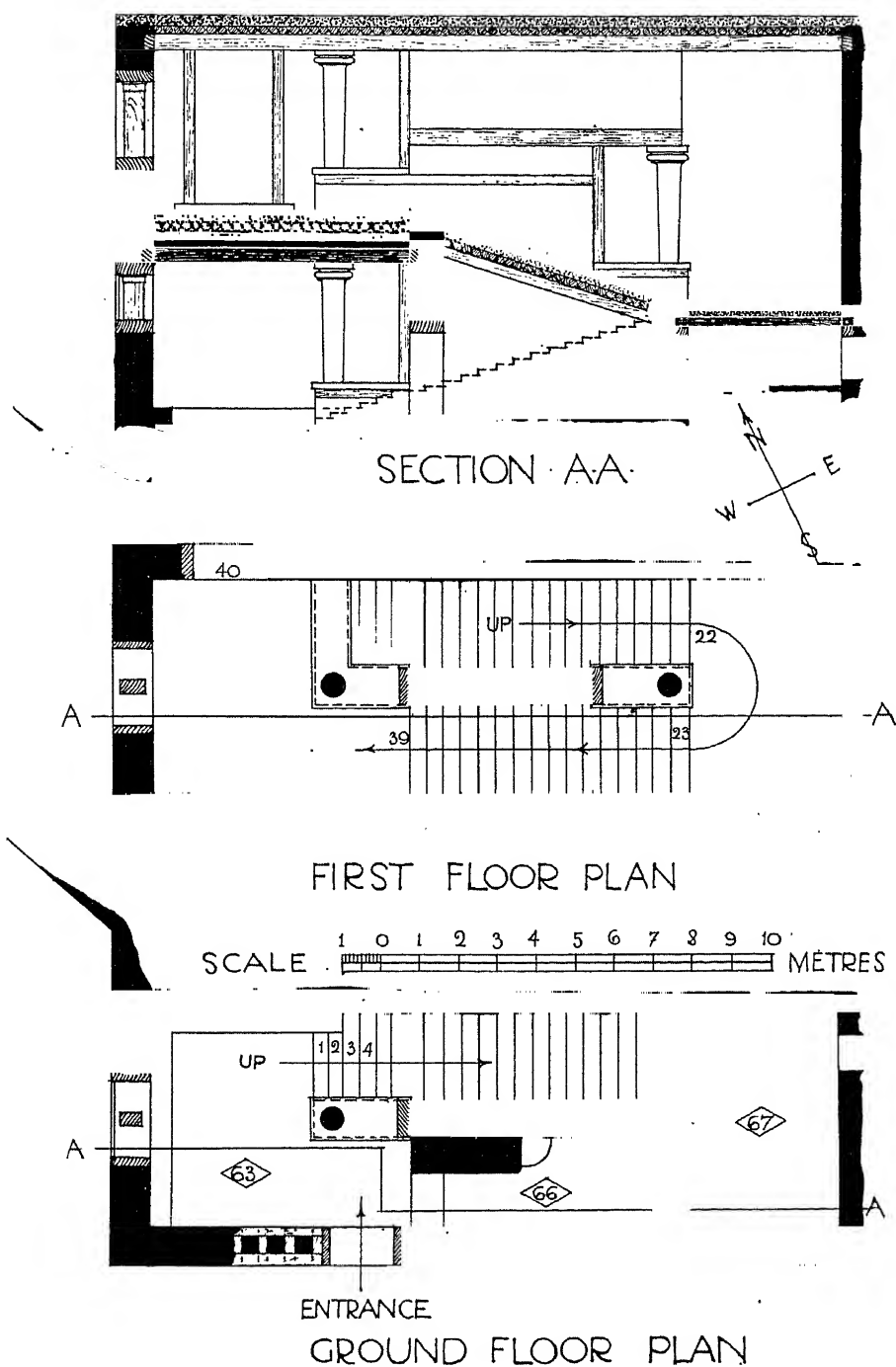


FIG. 34.—GRAND STAIRCASE, RESTORED. PLANS AND SECTION.

## THE CENTRAL LOBBY.

If, instead of passing from the entrance through the West Lobby to the foot of the stairs, we turn sharp to the right or east, we step up over a slightly raised threshold of poros, probably once covered with stucco, into an oblong room (cf. Pl. XXII. *a*) (66) which lay underneath the upper flight of the staircase (see Fig. 34). There are large blocks of dressed poros on either side of the doorway which probably were the bases of piers to support the upper flight of the staircase, with a big buttress on the east side of the northern pier. This Central Lobby was floored with cement, and in the north-west angle by the buttress we found a shallow semi-circular basin or sink in the cement floor. This basin had been disused, filled up with rubbish, and the cement floor carried above on a level with the rest of the lobby. In this basin we found one handleless cup like those found under the West Lobby, the foot and two fragments of the rim of unpainted kylikes, and one piece of a plain bowl similar to those from under the floor of the room north of the Western Portal (42, 43, see p. 218 below), and six sherds of coarse domestic ware. With them was a fragment of an altar or movable hearth of painted stucco,<sup>1</sup> and a few other small pieces of unburnt fresco.

This evidence agrees well with that of the pottery found in the stone bench in the West Lobby, and confirms the idea that the staircase took its final form in L.H. III. A test-pit was also sunk below the floor of the Central Lobby down to the rock with the following result. A layer of earth below the cement floor some .20-.30 m. thick was revealed, and then a heavy mass of stone-fill similar to that below the West Lobby and presumably running down to the rock. We dug to a depth of 2.20 m. below the floor without reaching the rock, and were unable to go deeper owing to the narrow space and dangerous state of the sides of the pit, which threatened to fall in. We found a considerable amount of pottery classified thus :

Late Helladic I.-II., six sherds similar in character to the pottery from below the floor of the East Lobby (67).

Handleless cups, sixteen sherds.

<sup>1</sup> Side (*a*) .055 × .018 m., orange stripe, probably originally red. Above, in black on white, traces of pattern similar to the fresco, *B.S.A.* xxiv. p. 199, I., and the vase, Evans, *Prehistoric Tombs*, p. 157, Fig. 142 *b*.

Side (*b*) .06 × .033 × .023 m., crescents, black on white, cf. the M.M. II. *b* fresco fragment with crescents from Knossos, Evans, *Palace of Minos*, I. p. 251, Fig. 188 *b*.

Late Helladic III., at least ten pieces of kylikes.

Unpainted ware L.H. I.-III., forty fragments.

Coarse domestic ware, sixteen fragments.

The presence of rather more L.H. III. ware here strengthens the impression that the staircase was not finished till that period, and may even then have been built on a foundation (the stone-fill) laid down at an earlier date. The south wall of this Central Lobby has vanished, and its place has been supplied by a poorly-built Hellenistic wall. The east wall still exists and shews that there was no direct communication between the Central and the East Lobby, the floor of which is considerably higher.

#### THE EAST LOBBY.

The East Lobby (67), which, as we shall see, lay below the landing at the top of the first flight of the staircase, was entered by a small door at the north end of its east wall, where there is a rough limestone threshold. Unfortunately, all to the east of this door has been disturbed or destroyed. Apparently this part collapsed after the destruction of the Palace when the south side of the Megaron fell down the precipice; a glance at the plan shows that this part was immediately adjacent to the west end of the substructures of the Megaron. This collapse must have occurred soon after the burning of the Palace, because the ruins just to the east of this East Lobby are held up by an oblique wall which acted as a terrace wall to retain the south end of the foundations of the Doric temple. In the heavy fill behind this wall, which renders further examination of this region impossible, we found one or two fragments of L.H. III. pottery, and one piece of a terracotta female figurine, but also a certain amount of archaic Greek pottery of the orientalisising period. Thus this wall would have been built in the seventh or sixth century B.C., a circumstance which indicates clearly that all this part of the Palace had by then already fallen away into the ravine.

In the centre of the base of the west wall of the East Lobby there is a large rectangular poros block 1.40 m. long, which was presumably the foundation for a rubble pier to support a similar pier or a wooden column in the storey above.

As can be seen in the restored plans and section of the staircase, Fig. 34, the distance between the floor and the probable roof of the

East Lobby is so short that the lobby can never have been much more than a cellar. This idea is strengthened by the fact that access to it was obtained not from the Central Lobby, but from other basement rooms further east. The walls of the lobby were covered with a plaster of rough clay well mixed with chopped straw. At the base of the north wall just above the floor level there is a wooden beam carbonised and much decayed. It seems to have been of pine or cypress, and at least .15 m. thick. In the upper part of the west wall just under the top step of the first flight of stairs there are three holes .08 to .10 m. in diameter to take the ends of horizontal wooden beams.<sup>1</sup> They would have been too slender to give much support to the floor of the landing above, unless they in turn had rested on heavier beams below. They are at a height of 1.30 m. above the level of the floor, which was of earth trodden hard with a thin clay layer over it. The idea that this East Lobby was merely a sort of cellar thus has every justification. The lobby when excavated was filled with a mass of débris, fallen rubble masonry, decomposed mud brick, discoloured fresco fragments and so on, all burnt and calcined and welded together in a solid mass by some violent conflagration, as shown by the disintegration of the limestone blocks among it. On the floor and above it we found a certain amount of miscellaneous pottery as follows :

Middle Helladic, Matt-painted, Group B. I., five sherds.

Yellow Minyan and plain polished ware, seventeen sherds.

Matt-painted, Group B. III., one sherd.

Late Helladic I., six, including one piece painted inside with a design of leaves in the Cretan manner.<sup>2</sup>

Handleless cups, four.

Late Helladic III., fourteen.

Late Helladic, plain ware, seventeen.

Coarse domestic ware, two

The thin clay floor mentioned is .05 to .10 m. thick, and below this was a layer of black earth at least .25 m. thick, which in turn rested on a heavy mass of loose fill of rough limestone blocks. We dug into this fill for a depth of 2 m. below the floor without finding the rock, but could go no deeper owing to its insecurity and the narrow space. In the earth

<sup>1</sup> The first and second are .42 m. apart in centres, the second and third .97 m. apart.

<sup>2</sup> Cf. the Zakro pottery, *J.H.S.* 1903, pp. 251 ff., and that from Palaikastro, Bosanquet-Dawkins, *Unpublished Objects*, pp. 24, 27.

which lay on the fill to form a backing for the floor (and therefore had presumably been laid there deliberately after the fill was put in) we found a few fragments of fresco and a great quantity of pottery, nearly all of L.H. I. date, and of other household refuse, including bones of sheep, pigs and other animals, oyster and mussel-shells. All the animal-bones were broken for the extraction of the marrow and they and the shell-fish give us a glimpse of the Mycenaean dietary.

### *Pottery.*

The pottery, which was very homogeneous in character, may be classified as follows :

Middle Helladic, Matt-painted, Group B. I., a few pieces, but rare compared with the L.H. I. ware described below. Such Matt-painted ware, as pointed out by Blegen,<sup>1</sup> not infrequently occurs in L.H. I. deposits as a partial substitute for the coarser ware.

Grey Minyan, very few sherds.

Yellow Minyan, there were great quantities of this and the plain polished ware allied to it.<sup>2</sup> The presence of this in a deposit of unmistakable L.H. I. pottery shews clearly that Yellow Minyan Ware is the immediate descendant of the plain polished Middle Helladic Ware of which it is a refinement. This pottery is the intervening link between the plain polished M.H. wares akin to grey Minyan and the unpainted vases of good technique with a yellow-buff fine-polished slip of L.H. I.-III. The biscuit of this ware is red-buff and well-baked and firm, though the clay is not always very well levigated. It is covered with a yellow-buff slip which takes a good polish and is smooth and consistent. In spite of the shapes and clay, which are at times rather clumsy and coarse, this ware is well made and as pottery is excellent. Not all of it is wheel-made : at all events it shows no signs of the quick wheel like the corresponding unpainted ware of L.H. III. The shapes that could be recognised are :

I. Goblets of a Minyan type, but with a low ringless stem. The profile is sharp and metallic ; and the vertical ribbon handles often have a stud at the top showing the influence of the metal technique. A restored specimen of this shape, which is very characteristic of the late M.H. and the L.H. I. periods, is seen in Fig. 35.<sup>3</sup>

II. Shallow bowls of a kantharos type with high swung handles (cf. *Korakou*, Figs. 18, 19).

III. Jugs with cutaway necks (cf. *Korakou*, Fig. 51, 1, p. 41).

Among the coarser domestic ware there were many handleless cups in

<sup>1</sup> *Korakou*, p. 44.

<sup>2</sup> Cf. Blegen, *op. cit.*, p. 18.

<sup>3</sup> Cf. the similar vase from the Sixth Shaft Grave, Furtwängler-Loeschcke, *Myh. Tongefässe*, Pl. X. 49.



red clay of the type already discussed (p. 150, above), many legs from three-legged cooking-pots or chafing-bowls, and the bases of two jars with potters' marks, one with ||| and the other with three dots.

Late Helladic I., painted ware : these shapes were recognised :

I. Cups of the Vaphio or Keftiu shape (*Korakou*, Figs. 53, 54), with patterns of spirals, stars and conventional foliage designs (Pl. XXIII. *c*, *d*, *g-k*); some of the pieces have added white.

II. Shallow spreading cups of fine fabric and of a teacup type (Pl. XXIII. *a*; cf. *Korakou*, Fig. 51, 2, 3). These are imitations of metal cups similar to the silver bowl from the South House at Knossos,<sup>1</sup> which,



FIG. 35.—GOBLET (L.H. I.) OF YELLOW MINYAN STYLE  
(restored) FROM EAST LOBBY OF GRAND STAIRCASE.  
(Scale 1:3.)

like the examples from this deposit and the fine specimens from Tombs 518 and 529, are decorated with an elegant spiral design. One is glazed inside in the Cretan manner, and the example here figured has added white.

III. Small jars with narrow necks (no fragment large enough to make the shape certain); patterns employed are hatched leaves, running spirals (Pl. XXIII. *p*) and the double-axe (Pl. XXIII. *l*). This last piece recalls some of the vases from the First Shaft Grave.<sup>2</sup>

IV. Shallow open bowls decorated with foliage patterns or curved rippling lines set rather wide apart (Pl. XXIII. *e*, *n*). One piece is of

<sup>1</sup> Gillieron, *Nachbildungen Mykenischer und Kretischer Altertümer*, Pl. XXIII, No. 122.

<sup>2</sup> Furtwängler-Loeschcke, *Myk. Tongefässe*, Pl. III. 10, 11.

very early style and recalls some fragments from Korakou in style, fabric and paint (Pl. XXIII. *o*).<sup>1</sup>

The tall open jar seen in Pl. XXIII. *b*, with a fine spiral pattern and added white paint, is covered with red glaze paint inside in the Cretan manner. Another small piece is decorated within and without in the Cretan style like the Zakro pottery (Pl. XXIII. *m*). There is part of a large vase adorned with a pattern of hatched leaves and big dots in the interspaces (Pl. XXIII. *f*). The stippled or thrush-egg pattern and the grained or rippled pattern are represented by one small sherd each.

#### *Fresco.*

There were some coarse fragments of floor-plaster and some unimportant fragments of wall-plaster, all burnt, and the following unburnt fragments :

(i) Pl. XXV. 1,  $\cdot 07 \times \cdot 037 \times \cdot 007$  m. Grey-black on white ground with a red patch in the right-hand corner. The dark markings suggest buds or part of a floral pattern: the piece might be connected with No. 1 from the Pithos Area.

(ii) Pl. XXV. 2,  $\cdot 085 \times \cdot 035 \times \cdot 006$  m. Black and red on white. Probably the black indicates the stalk of a plant, and the red, the ground from which it springs.

As none of the pottery found under this floor is later than L.H. I., these fragments of fresco can be considered as belonging to the First Palace.

The conclusions to be drawn from this deposit support the observations already made on the similar though less rich layer beneath the floor of the West Lobby. It is especially worth noting that one fragment of a cup of the Vaphio or Keftiu shape from this deposit joins another fragment found below the floor of the West Lobby. This indicates that these two deposits belong together, and that the soil laid above the stone-fill in the West and East Lobbies to back the clay and cement floors was dug out of the same place.

#### THE STAIRS.

A flight of twenty-two steps leads up the Grand Staircase from the West Lobby (Pl. XXII. *a*). These are made of small pieces of a very light sandstone ash-grey in colour, carefully cut and fitted together.<sup>2</sup> Each tread was covered with firm white stucco, which required constant repairs, for some of the treads show even now as many as five coats. At the top of this flight was a landing directly above the East Lobby (Fig. 34).

<sup>1</sup> Blegen, *op. cit.*, Fig. 49, 3, 8, 9.

<sup>2</sup> Below the wide step the treads are  $\cdot 12$  m. high and  $\cdot 37$ – $\cdot 40$  m. wide; above the wide step they measure  $\cdot 15$ – $\cdot 16$  m.  $\times$   $\cdot 44$ – $\cdot 45$  m.

Here the staircase turned at right angles to the right, and perhaps, though it does not seem likely, owing to the difference in width between the landing and stairs, ascended two more steps in the floor of the landing. Such an arrangement exists in the staircase at Knossos. From the landing there was another flight of probably seventeen steps. At the east end of the dividing wall between this upper flight and the lower flight there was possibly a low open balustrade with a wooden column at the end carried on the pier based on the big poros block in the centre of the west wall of the East Lobby, in order to correspond with that already noticed in the West Lobby at the bottom of the first flight. The upper flight would have come to an end as indicated in the restored plans and section (Fig. 34) directly above the entrance which leads to the Central from the West Lobby. It is more likely to have stopped here because the head of the stairs would then have been carried on piers based on the big poros blocks on either side of the entrance door. Otherwise if the upper flight had ended in a line with the beginning of the lower, there would be no suitable foundations strong enough to bear it. Probably the upper flight was supported on wooden beams resting in walls of rubble masonry, and any superstructure above necessary to roof the staircase was of crude brick. Another consideration is that an upper flight of seventeen steps would bring one to a level of 72, which is more than enough to attain the level of the floors of the Court (53) and Room of the Throne (52) (see Pls. II., XXIV.). The staircase may have ascended yet another flight, but this seems unlikely, for its purpose apparently was to enable one to reach the Court from the roadway coming up from the Ramp.<sup>1</sup> It presumably was roofed, but there is no indication how this was achieved. Thus from the upper landing at the head of the staircase the visitor would enter the anteroom (61) or open space in front of the Room of the Throne (52). Before, however, we discuss them we must first consider the Pithos Area (50, 62) which lies beyond the staircase to the north-west and on a level approximately with the floor of its West Lobby.

### 3. THE PITHOS AREA.

The west wall of the West Lobby of the Grand Staircase at its north end meets at an obtuse angle the southern end of the long terrace wall

<sup>1</sup> See p. 148, above.

which supports the Palace area on the west, and (see plan, Pls. II., XXII. *b*) is built with a long series of set-backs. The first set-back reckoning from the south occurs some 6 m. to the north of its junction with the west wall of the staircase. The second set-back is 3.50 m. further north. From this angle, close to where the remains of the five pithoi still stand (Pl. XXII. *b*, *c*) which have given their name to this area, the terrace wall runs west for 2.50 m., then north again for 1.50 m. and then west for 2.50 m. more. Here it turns definitely northwards, and this point (level 68.15) marks the end of the roadway leading up to the Western Portal (45) from the north-western Propylon (9). From the first set-back right along to the north-western Propylon this terrace wall is built of large blocks of limestone laid in the usual Cyclopean manner, the interstices being filled with smaller stones and tough yellow clay. The angles are well built, and for Cyclopean work the construction is comparatively regular. The remaining piece of the wall, between the first set-back and the north end of the west wall of the staircase, is quite different in style. The stones are less big, rougher and nothing like so carefully laid. At the first set-back this ruder stretch of wall runs behind the other and does not bond with it. Also there is no proper angle to the better built wall just by the southernmost of the five pithoi. Evidently there are two walls of different dates or at least belonging to different schemes. As at the first set-back by the southernmost pithos the ruder wall runs behind the other, and leaves very little space between them, it would have been impossible to build the ruder wall while the other was standing. Therefore the ruder wall should be the older, and the long northern stretch running along to the Propylon (9) a later widening of the terrace on this side (Pl. XXII. *b*, *c*).

The five pithoi at the northern end of this area were found by Tsountas,<sup>1</sup> who unfortunately does not say what was found with them, and gives no clue to their date. The foundations of a wall, consisting of small stones, run parallel to them on the west, and possibly were the base of a wall which enclosed the space where they stand. It is clear that the pithoi must be later than the terrace wall, since it would have been impossible to build the wall by the two southernmost pithoi without destroying them completely. They do not appear to be of Mycenaean fabric, and as they are later than the terrace wall, it is very likely that

<sup>1</sup> *Πρακτικά*, 1886, p. 73.

they are not older than the period of Geometric pottery, and it is quite possible that they are Hellenistic. Immediately to the west of them there are several Hellenistic constructions, and we found on the same level as the pithoi a small amount of Hellenistic pottery. Thus we can conclude the pithoi are at all events later than the Mycenaean age, and do not concern the Palace, or any discussion of the problems connected with the Terrace Wall and its relation to the Grand Staircase.

The whole area from the west wall of the Grand Staircase (62) to the actual place where the pithoi stand (50) is a kind of terrace retained on the west by walls that are Hellenistic, but such must have replaced earlier walls. The earth of this terrace is very curious. It is a soft greyish-yellow fine earth with no big stones, though many small pebbles, in it. It is also remarkable for the fact that save for the exception noted below it contains practically no potsherds or other débris. It seems to be a thick homogeneous layer of earth unmixed with refuse. It would thus seem to have been deliberately placed there at some period in the construction of the Palace.

### *Frescoes.*

On the surface of this earth, that is to say, at about or slightly below the level on which the pithoi stand, Tsountas found large quantities of fresco fragments; probably most of the unburnt fresco fragments from Mycenae in the Athens and Nauplia Museums come from this area, where nothing to the contrary is known. Many other pieces were found there by ourselves: of these, two, Nos. A. 2 *a* and *b* in the list below, join pieces now in Athens from Tsountas' excavations, and others belong to the coarse spiral, B. 12 (i).

Therefore, though it is probable that the burnt pieces Nos. B. 6, 7, and 14 i., come from other parts of the Palace, we have assigned to the Pithos Area all unburnt fresco the provenance of which is unknown, and have described them in list B. below. In the same list we have included the few burnt pieces, and also the fresco with horses and men (Pl. XXVII.) from outside the Western Portal, which cannot well be discussed apart from the rest. Under A. are described the fresco fragments found by ourselves in 1921.

*A. Fresco found by the British School in 1921.*

1. Pl. XXV. 3,  $\cdot 027 \times \cdot 028 \times \cdot 007$  m. Black on yellowish-white ground.

Part of plant: it may derive from an original like the fragment with grass in seed from Knossos; <sup>1</sup> its style suggests an early period.

2. (a)  $\cdot 05 \times \cdot 047 \times \cdot 022$  m. (b)  $\cdot 046 \times \cdot 044 \times \cdot 02$  m.

Blue circle, about  $\cdot 03$  m. wide, on a white ground. The inner line of the circle is incised; on the outer side are groups of red lines at regular intervals; on the blue, an inner and outer row of black scallops.

There are twelve or more <sup>2</sup> pieces of the same fresco in the National Museum, Athens,<sup>3</sup> from Tsountas' excavations. These he found west of the Western Portal and the Throne Room,<sup>4</sup> presumably on the terrace of the pithoi itself. They show portions of rosettes, slightly irregular in size and detail. Two join our fragments, and are illustrated together with four others on Pl. XXV. The reconstruction produces a rosette pattern: the centre is blue with a red border and stamens, the blue stripe has faint traces of black scallops and incised borders which are not always carried round the circle; outside are the groups of red lines and a blue circle. The pattern is practically the same as that on the dado illustrated in Rodenwaldt, *Tiryns*, ii. Pl. IV. p. 31, of which the rosettes, like ours, were uneven in size; it differs only in having more carefully drawn scallops, two colours in the central spot, and an outer ring of blue. Its stamens are of the earlier type; in the Tirynthian example they have degenerated into dots.<sup>5</sup>

The thickness of the plaster suggests that it came from a dado; it may be reconstructed with the rosettes arranged flower-like on stalks on the analogy of the dado from Tiryns. For a possible fragment of the lower border see below, p. 171.

The Tiryns dado comes from the First Palace, and ours must be of approximately the same period, or slightly earlier.

3. Pl. XXV. 4,  $\cdot 063 \times \cdot 048 \times \cdot 015$  m. Grey (originally black) leaves and ovals on light yellowish-red ground. The black has sunk into the plaster and must, therefore, have been put on when the plaster was wet. The plaster is corroded, and other colours and black retouches, if any, have been lost. Probably part of background.

A considerable number of similar fragments were found.

4. Pl. XXV. 5,  $\cdot 063 \times \cdot 038 \times \cdot 012$  m. Below, red stripe, with border of darker red. Above, two wavy black lines on grey-blue ground, and red line on yellow ground. On the right, a black line and blue ground.

Probably imitation marbling <sup>6</sup> against a strip of imitation woodwork.

<sup>1</sup> Evans, *Palace of Minos*, i. p. 537, Fig. 390.

<sup>2</sup> The number is uncertain, as some of the fragments show merely blue on white, and may therefore belong to another fresco; see below, p. 171, No. 14 (v).

<sup>3</sup> Inv. 2783. Rodenwaldt, *Der Fries des Megarons*, p. 69, note 154, B. 3.

<sup>4</sup> See p. 162. <sup>5</sup> For development of the rosette see Rodenwaldt, *Tiryns*, ii. pp. 56-58.

<sup>6</sup> Cf. Rodenwaldt, *Tiryns*, ii. p. 28; Evans, *Palace of Minos*, i. p. 356.

Two fragments of the same fresco were found.

Of the fragments not important enough for publication, some shew imitation marbling, among which are several thin pieces with grey lines on white. Many come from the coarse spiral pattern mentioned above (p. 162) and described below as B. 12 (i). Most were rubbed, badly discoloured, and of very small size.

The style of the Pithos Area fresco, being earlier than L.H. III., confirms the evidence of the pottery, that the deposit of which they form part was laid down at the time of the building of the present palace in L.H. III., when the Pillar Basement and adjoining rooms were first constructed.

B. *Fresco found by Tsountas in 1886.*<sup>1</sup>

1. *Frieze with Warrior, Grooms, Horses and Chariots*, Pls. XXVI. b, XXVII. Rodenwaldt, *Ath. Mitt.* 1911, p. 239, and *Der Fries des Megarons*, p. 69, n. 154, A. 2. The fragments are at Athens, including the fragments of chariot-wheel formerly at Nauplia from the same frieze.

This fresco is one of the most important found at Mycenae, partly owing to the subject, which is similar to that of the Megaron frieze, partly to the style and unburnt condition, which suggest a comparatively early date. Though Rodenwaldt considers it less carefully executed and therefore later than the Megaron frieze, its smaller scale is in favour of an earlier period. The Megaron frieze is to be dated by the archaeological evidence much later than Rodenwaldt suggested. We would therefore place this frieze B. 1 in the Second Late Helladic period, to which Rodenwaldt also assigns it. He, however, considers the frieze of the Megaron to be Late Helladic I.

All the fragments of this frieze are illustrated on Pls. XXVI. b, XXVII. i-vii. They are combined into a reconstruction partly because some of the newly-published pieces are more comprehensible if completed, partly in the hope that a reconstruction, even though largely conjectural, may give a clearer impression of the frieze as a whole than detached pieces.

Most of the details have been supplied from the Megaron frescoes. The relative positions of the horses are of course uncertain; while the chariot on Pl. XXVI. b, presumably unyoked, may be thought of as awaiting a pair of horses like those illustrated on Pl. XXVII.

In the following notes, the letters preceded by R. refer to the items as arranged by Rodenwaldt in *Ath. Mitt.* 1911, p. 239, where descriptions and a discussion of details will be found.

(i) and (ii) = R. a. Rodenwaldt thinks only one horse is represented. He explains the black as the colour of the horses, the red as part of the preliminary sketch revealed by the flaking off of the black.

Given the combination of a red and a black horse in fragment iv, and

<sup>1</sup> In list B. measurements are only given to assist identification. They are omitted when the fragments are illustrated or have been previously published. The fragments are unburnt, unless it is otherwise stated.

comparing the fragments from Tiryns which shew a pair of horses,<sup>1</sup> it seems probable that our fragment likewise illustrates a pair. It is not strange that the red of the further horse should underlie the black of the nearer horse in various places, *e.g.* in ii, where the black has been rubbed away. It is not, of course, certain that fragments i and ii belong to the same pair as fragments iii and iv.

(iv) = R. *b*. The illustration on Pl. XXVII. shews the small fragment in the lower right-hand corner mentioned in *Ath. Mitt.* 1911, p. 241. The red object behind the groom, as to the meaning of which Rodenwaldt was uncertain (*loc. cit.*), is the hind-quarters of another horse. The groom holds two objects that look like spears, though there is no trace of them above, and a single rein which forks near the horses' heads and is attached to each bridle.

(v) = R. *d*. Here and in (i) the men's legs in the reconstruction should probably have been shewn on the same level as the horses' legs.

(vi) = R. *c*. The red object in front of the horse's ear may be the forelock, tied into a knot in the same way as the mane. If so, it differs from the horse in *c*, but can be compared with *Tiryns*, ii. Pl. II. 1.

(vii) Fragment with leg and foot on blue ground.

(viii) = R. *e*. On the blue ground are: (i) in the upper right-hand corner, yellow and black marks which remain unexplained; (ii) hand holding a spear, red; (iii) what may be the hind part of a chariot, red, with black markings spotted white. For the black markings a parallel has been found in the chariot on the tablet from Knossos, *B.S.A.* vi., Fig. 12.<sup>2</sup>

(ix) Lower part of chariot and wheel. Formerly in Nauplia, Rodenwaldt, *Fries des Megarons*, p. 69, n. 154, A. 2. Blue ground; wheel yellow, chariot red. Any markings which may previously have been on the wheel are lost, but a red line can be detected belonging to the preliminary sketch.

(x) = R. *f*. Part of the framework above the chariot-pole. Yellow on blue with black and red markings. Behind, part of the chariot in red. The position is shewn in the reconstruction; cf. *Tiryns*, ii. p. 98, Fig. 40.

The last three fragments have been combined in the reconstruction (Pl. XXVI. *b*), but as all possible arrangements make the chariot longer in proportion to its height than is usual in fresco painting, they probably come from different chariots.

2. *Uncertain object*, .053 × .032 × .018. At Athens. The style connects it with No. 1, to which it may well belong. Yellow ground spotted with red; curved blue line with black marks; blue and red objects on white ground.

3. *Charioteer*. Rodenwaldt, *Fries des Megarons*, p. 69, n. 154, A. 4; *Tiryns*, ii. p. 10, n. 1. At Athens. Small scale, and connected in style with fragment No. 5 from the first Palace at Tiryns.

<sup>1</sup> Rodenwaldt, *Tiryns*, ii. p. 98, Fig. 40; Pl. XI., 4; p. 110; Pl. XI., 11, p. 99. The strongest argument in favour of there being one horse is that there are black marks on the red.

<sup>2</sup> Rodenwaldt, *Ath. Mitt.* 1911, p. 245, n. 1. For chariots see E. v. Mercklin, *Der Rennwagen in Griechenland*.



4. *Hand and part of dress of female charioteer.* Rodenwaldt, *Fries des Megarons*, p. 69, n. 154, A. 5; *Tiryns*, ii. 108, Fig. 46. At Athens. Small scale: assigned to period of earlier Tiryns frescoes.

5. *Woman's Head.* Rodenwaldt, *op. cit.*, p. 69, n. 154, A. 5; *Tiryns*, ii. p. 108, Fig. 45. At Athens. Assigned to period of earlier Tiryns frescoes and compared with type of head on the bull-leaping fresco, Knossos.

6. *Fragments of women, burnt, life size.* Rodenwaldt, *Fries des Megarons*, p. 69, n. 154, A. 8. At Athens. Six or seven pieces of fairly fine style: the blue is burnt to violet and the colouring resembles that of some burnt fragments from the Porch. They may have decorated the Porch: on the other hand, if, as seems probable, they are the remains of a procession of women, they would have come from the walls of a corridor.<sup>1</sup>

They include: (i) part of a crown,  $\cdot 098 \times \cdot 063 \times \cdot 01$  m. (including backing of coarse plaster =  $\cdot 07$  m.). This is used in Rodenwaldt's reconstruction, *Fries des Megarons*, p. 50, Fig. 26; (ii) part of a belt,  $\cdot 06 \times \cdot 033 \times \cdot 027$  m., blue-grey, white and red; (iii) fragment with scales, possibly from sleeve,  $\cdot 115 \times \cdot 085 \times \cdot 027$  m.; (iv) fragment with scales, possibly from skirt,  $\cdot 067 \times \cdot 053 \times \cdot 022$  m.; and (v) piece presumably from border of this frieze,  $\cdot 055 \times \cdot 042 \times \cdot 01$ – $\cdot 035$  m. with edging of stripes.

The "Sacral Knot" used in Rodenwaldt's reconstruction (*loc. cit.*) is of different style and belongs to No. 7.

7. *Fragments of women, burnt, life size.* Rodenwaldt, *op. cit.*, p. 69, n. 154, A. 8. At Athens and Nauplia. Six or seven pieces so much coarser in style and burnt in such a different manner from those of No. 6 that it seems necessary to separate them. They include (i) the "Sacral Knot,"<sup>2</sup>  $\cdot 15 \times \cdot 103 \times \cdot 13$  m., Rodenwaldt, *op. cit.*, Fig. 26; (ii) a fragment with red stitching (?) on a red ground,  $\cdot 175 \times \cdot 08 \times \cdot 013$  m., and (iii) part of the border of a bodice,  $\cdot 08 \times \cdot 065 \times \cdot 013$  m.

8. *Frieze of women, half life-size.* About 70 fragments may be assigned to this with certainty. Pl. XXVIII. At Nauplia. Rodenwaldt, *Der Fries des Megarons*, p. 69, n. 154, A. 11; *Tiryns*, ii. p. 92 (where the various friezes of women from Mycenae are not yet distinguished).

The plaster is fine (usual thickness,  $\cdot 005$ – $\cdot 01$  m.), the drawing neat and careful. The fresco is probably to be dated to the Second Late Helladic Period, on the analogy of the other unburnt fragments found by Tsountas. The style is remarkably different from the somewhat coarse style of the procession of women from Tiryns (L.H. III.),<sup>3</sup> but not far removed from the delicate style of that from Thebes (L.H. I).<sup>4</sup> The motive would no doubt be the same as that of the Theban and Tirynthian frescoes: women in procession holding offerings.

<sup>1</sup> On the analogy of the processions from Knossos (*B.S.A.* vi. p. 12) and Thebes ('Εφ. 'Αρχ. 1909, Pls. I. and II., p. 90).

<sup>2</sup> Cf. Evans, *Palace of Minos*, i. p. 430.

<sup>3</sup> Rodenwaldt, *Tiryns*, ii. pp. 69 ff.

<sup>4</sup> 'Εφ. 'Αρχ. 1909, p. 90; 'Αρχ. Δελτίον, iii., p. 339, Fig. 193.

The figures move both to the right (*a*) or to the left (*b*). In common with the Theban and Cretan frescoes, some at least of the figures are depicted with the upper part of the body full face.

The more important pieces are illustrated on Pl. XXVIII.

(*a*) Inner corner of woman's eye; part of eyebrow and of hair. Black on white except for the red interior markings of the eye; cf. *Tiryns*, ii. p. 85. The woman faced to right.

(*b*) Hair and headband, on blue ground. The curls on the forehead are shewn, and the lower part of the puff of hair which rises like a top-knot above the fillet.<sup>1</sup> The complete arrangement is seen in *Tiryns*, ii. p. 82, Fig. 34. The headband is red with white spots.

(*c*) Strand of hair (?), black on blue ground. It is crossed by a blue band bordered with red, probably a ribbon. In one corner is a rosette, yellow with red border and centre, perhaps a pin in the hair; cf. pins from Mochlos.<sup>2</sup>

(*d*) The junction of necklace and sleeve. The necklace has two chains: of the upper we see part of a blue pendant and a red mark belonging perhaps to another bead, though its position is not easily explained; the lower chain consists of a red and yellow pendant between small black beads threaded on red. Part of what is probably the upper border of a sleeve—an outer red stripe, a yellow and a black-and-white stripe as in (*e*). Blue ground. The stripes are outlined in black with the exception of the red stripe where it meets the background.

(*e*) Part of neck with necklace, and of border of jacket. The border is of red, yellow, and black-and-white stripes with black outline. The necklace is of small round black beads and red, blue and yellow pendant beads on a red cord. The beads have no outline. The chain is probably the upper row of two (see *f*).

For the shape of the beads the best analogies are in the actual objects. The necklace pendants may represent carnelian, faience or lapis and gold,<sup>3</sup> which would most simply explain each colour, without postulating any colouristic convention, and the small black beads may represent the round beads of paste, stone or other materials so common in all Mycenaean tombs.<sup>4</sup>

(*f*) Border of bodice and part of neck. The bodice is red, with a border as in (*d*) and (*e*). The white ground to the right is probably part of the neck: on it is a yellow mark outlined with black, which may be the pendant of a necklace. Though the pendants are not outlined in (*d*) and (*e*) there is a black line on the yellow pendant of (*d*); moreover, details vary in individual figures.

A red and black line crossing the white may be the lower thread of the

<sup>1</sup> For discussion of arrangement of hair, see Rodenwaldt, *Tiryns*, ii. p. 83 ff.

<sup>2</sup> Evans, *Palace of Minos*, i., Figs. 67, 69, pp. 96, 98.

<sup>3</sup> For carnelian, see Tombs 518, 526, 529 in the Kalkani Cemetery. For lapis, cf. *Ath. Mitt.* 1909, p. 295, Fig. 12, 1. For gold, cf. Maraghiannis, *Ant. Crétoises* I., Pl. XVIII.

<sup>4</sup> Rodenwaldt, *Tiryns*, ii. p. 89, discussing similar beads on bracelets, explains them as amber.

necklace: if so, it is a variation of the usual form of necklace where the beads begin at once.

(g) Part of bodice. Red, yellow and black and white borders: on the right, blue and white ground marked black.

(h) Part of hand, the black outline painted directly on the white plaster. The position of the hand is that of one of the Theban fragments;<sup>1</sup> the fingers point upwards, grasping an object—in the Theban fragment it is a handle. The black lines below the joint of the fingers at the bottom of the fragment can hardly be the part of the hand: they may belong to another hand or to the object carried. Black and white suggests a pyxis, but the position of the fingers requires something with a handle. We recall the curious fragment of hand and object in *Tiryns*, ii. Pl. X, 7. Or if it is a case of two hands, we may compare the fragment at Thebes of two hands supporting a flower.

(i) Fingers of hand on red ground—evidently extended over an object, as in *Tiryns*, ii. Pl. X, 2, and in unpublished fragments from Thebes.

(j) Part of pyxis, black on white. The scale pattern is the same as that on the pyxis illustrated in *Tiryns*, ii. Pl. X., 3; the pyxis being thought of as ivory. For discussion, cf. *Tiryns*, ii. p. 88.

(k) The angular end of a red bodice above a blue girdle with black markings. The fragment is explained by one from Thebes which has the same pattern on the girdle. The ground is yellowish-white.

(l) Part of bodice, belt and skirt. This is the most probable explanation of the fragment. A reconstruction can be made on the analogy of a fragment from Thebes.<sup>2</sup> The bodice will have a border at its central opening, of blue (as at Thebes), and a lower border of black and white. The belt will be composed of the three stripes of red, yellow and red with black lines. Below is the upper part of the skirt, with wavy red lines on yellow.<sup>3</sup>

Fragments of wavy black lines on blue, of which there are a considerable number at Nauplia, come either from other dresses or belong to a different fresco.

(m) Frills of skirt: above, plain frill; below, frill of yellow, blue and red, decorated with black lines. The white ground to the right is part of the background.

(n) Uncertain object. On the left, two white objects with black lines and red tips, the ground being blue. Next a red line between two blue and two black, crossed by red marks. On the right, white ground, black line, red spot.

The style and technique connect this fragment with the rest of the frieze. Is it part of an object one of the women is carrying?

9. *Part of woman's profile*, .03 × .035 × .015–03 m. Pl. XXVIII. *p.* At

<sup>1</sup> 'Αρχ. Δελτίον, iii., p. 339, Fig. 193.

<sup>2</sup> Incorporated in reconstruction, 'Αρχ. Δελτίον, *loc. cit.*

<sup>3</sup> The patterns for this upper part of the skirt vary considerably: in Tiryns we have scales and small black arcs, and the latter occurs at Thebes; cf. *Tiryns*, ii. p. 95. For discussion of skirt cf. *Tiryns*, ii. pp. 76–9.

Nauplia. Small scale; the eye is black, the outline very faintly rendered in black, and the background blue. The scale is distinctly smaller, and the style different from that of No. 8.

10. *Part of border of dress* (?).  $\cdot 067 \times \cdot 055 \times \cdot 02$ . At Nauplia. Red, with border of scale pattern in red, white, blue and yellow: black outlines, white ground.

11. '*Spiral and Lotus Patterns*':<sup>1</sup>

(i) A large quantity of fragments came from a 'spiral and lotus' ornament: some of these are combined in a reconstruction on Pl. XXIX. At Nauplia.

The colours are as follows: red ground, white spiral with red centres; the petals blue; the filling between them white, blue, yellow, blue. On the white and yellow filling, the lines are red; other lines black.

The lower border is yellow, red and black; the upper, yellow and black. Above the black stripe on the reconstruction is a red stripe followed by blue, white, red, white, blue and red.

The height of the spiral pattern must be about  $\cdot 17$  m., to allow for proper proportion. The black and red stripes above are  $\cdot 025$  wide, the yellow and red below  $\cdot 028$ . It will be seen that the relative position of some of the stripes is conjectural: we are sure of the three below and the two above.

It would have been more usual for the spiral pattern to have been bordered above and below with white; the use of the red and black and the want of symmetry above and below is uncommon<sup>2</sup> and a proof of comparatively early date.

The plaster is thin (usually about  $\cdot 006$  m.) and of good quality: the execution exceptionally neat and pleasing, though more so in some places than in others. There is a slight irregularity in style, as in most Mycenaean friezes; the red lines on the yellow are sometimes single, sometimes in pairs, and the black outline is sometimes omitted (this may, however, be due to its having been rubbed off).

For discussion of the pattern and parallels see Rodenwaldt, *Tiryns*, ii. pp. 47-52, 175-9. The pattern is one of the most popular in the Late Helladic period—the earlier form, like the example on Pl. XXIX, has the lower row of flowers on the ground line; the later, as the example found by Schliemann at Tiryns,<sup>3</sup> has both rows of flowers springing from the space between the spirals and pointing downward and upward alternately.

This fresco, in common with the other unburnt fragments found by Tsountas, should be attributed to the earlier Palace and dated Late Helladic II. Rodenwaldt likewise assigns this fresco to an early date<sup>4</sup> and suggests it may be by the same hand as *Tiryns*, ii. Pl. VII.

(ii) One fragment,  $\cdot 08 \times \cdot 055 \times \cdot 018$  m. At Nauplia. White spiral with

<sup>1</sup> See Rodenwaldt, *Tiryns*, ii. p. 49, n. 1.

<sup>2</sup> Rodenwaldt, *op. cit.* p. 29.

<sup>3</sup> Schliemann, *Tiryns*, Pl. V.; Rodenwaldt, *op. cit.* p. 49, n. 1.

<sup>4</sup> Rodenwaldt, *op. cit.* p. 49, n. 1.

black lines and red centre. Blue flower, with blue, yellow and white filling : black and red lines : red background. Above, blue stripe with black bars. Coarser style than 11 (i).

(iii) One fragment, from a step,  $\cdot 07 \times \cdot 05 \times \cdot 033$  m. At Nauplia. Part of black-and-white spiral with white centre, of blue flower and red filling.

12. *Spiral Patterns* :

(i) About fifty-seven fragments from a large-scale spiral pattern,  $\cdot 02$  to  $\cdot 03$  thick. The original height must have been about  $\cdot 70$  m., and the upper edge is smooth, as though it had touched a beam : hence it is probable that this fresco comes from a dado.

The style is coarse and the state of preservation comparatively poor. It is difficult to believe that this fresco is early in date, though, naturally, inferior work was done at all periods.

Most of the fragments came from the filling between the spirals : scallops of the usual shape, composed of bands of blue, yellow, red and blue : small triangles, red bordered with yellow. Above and below, three stripes measuring together  $\cdot 08$  cm. Of these, the innermost is white, the next yellow with red bars, the outermost blue with black bars.

Of the remaining spiral patterns discovered by Tsountas, the most important are the following :

(ii) Spiral decorating fragment of altar : (a) horizontal face,  $\cdot 083 \times \cdot 07 \times \cdot 037$ ; (b) vertical face,  $\cdot 07 \times \cdot 042$ ; the spiral has a blue-black centre, red and black fill, a yellow stripe above and a red below. The vertical face has a red stripe and remains of a black-and-white pattern. At Nauplia.

(iii) Spiral decorating fragments of step, about eight pieces, the largest  $\cdot 145 \times \cdot 03 \times \cdot 015$  m. Red centre, black-and-white spiral. Spirals disconnected, as in *Tiryns*, p. 60, Fig. 22, *b* and *c*. Wide blue stripe above, bordered with black. At Nauplia.

(iv) From step : coarse spiral with blue centre. Two fragments, the largest  $\cdot 095 \times \cdot 07 \times \cdot 013$  m. At Nauplia.

(v) Three fragments of spiral resembling (ii), but thinner, and not from an altar. The largest  $\cdot 08 \times \cdot 035 \times \cdot 015$  m. At Nauplia.

(vi) Fragment from steps,  $\cdot 085 \times \cdot 085 \times \cdot 02$  m. Red and yellow fill below blue stripe. Thick black lines. At Nauplia.

(vii) Two fragments from step. The largest (a)  $\cdot 045 \times \cdot 045 \times \cdot 013$  m.; (b)  $\cdot 055 \times \cdot 027$  m. Spiral with red and yellow filling above blue stripe : a red stripe on the vertical face. At Nauplia.

(viii) Spiral with red and yellow fill below yellow stripe. Four fragments, the largest  $\cdot 085 \times \cdot 09 \times \cdot 009$  m. At Athens.

(ix) Spiral with blue and white fill below red stripe. Five or more pieces, the largest  $\cdot 08 \times \cdot 05 \times \cdot 013$  m. At Nauplia.

13. *Fragments of steps or altars* : decorated with irregular spirals or circles not running parallel to the edge.

(i) Pl. XXVIII o. Horizontal face,  $\cdot 062 \times \cdot 06$  m. Decorated with spirals

or circles: the centre is red, the lines are black and yellow, and give the impression that the spiral is not running parallel to the edge, but obliquely.

Vertical face,  $\cdot 025 \times \cdot 02$  m. decorated with blue, yellow and red overlapping scales (see 17 (iii)). At Nauplia.

(ii) Horizontal face,  $\cdot 02 \times \cdot 02$ , decorated with small white circles with red centres on black ground, arranged obliquely to the edge. Vertical face,  $\cdot 04 \times \cdot 03 \times \cdot 01$  m.; blue stripe, black line, yellow stripe. At Nauplia.

14. *Rosettes*:

(i) Part of two rosettes with stripes below: burnt.  $\cdot 08 \times \cdot 082 \times \cdot 013$  m. Apparently one rosette was blue, one yellow, and the fill red. A blue stripe with black bars and a yellow stripe can be distinguished. At Athens.

(ii) Fragment of rosette with yellow centre, and blue petals marked with black lines and dots,  $\cdot 075 \times \cdot 065 \times \cdot 017$ . At Nauplia.

(iii) Fragment with blue petals edged with black scallops.  $\cdot 045 \times \cdot 03 \times \cdot 017$ . At Nauplia.

(iv) Fragment with blue petals against black scallops or black ground and the end of a red stamen,  $\cdot 042 \times \cdot 033 \times \cdot 022$ . At Nauplia.

(v) See p. 163, A. 2. At Athens.

15. *Border* (?). If, as seems probable, 14 (v) was part of a pattern like that on the dado at Tiryns,<sup>1</sup> we may recognise part of its border in the following fragment:

$\cdot 093 \times \cdot 06 \times \cdot 015$ . Blue ground, originally covered in part with some colour. A black band decorated with a network of white spots; remains of two red stripes, one at right angles to it, one parallel to it.

16. *Marbling*:

(i) Fragments of dado: (a)  $\cdot 10 \times \cdot 08 \times \cdot 23$  m., black lines, red spots on yellow and white ground; (b)  $\cdot 075 \times \cdot 052 \times \cdot 032$  m., black lines on grey, red lines on yellow; (c)  $\cdot 145 \times \cdot 13 \times \cdot 035$  m., grey, black or red on white. The lines and markings are irregular.<sup>2</sup> At Athens.

(ii) Fragments of dado—black wavy lines on yellow, black on white, red on yellow, red on white, black on red. Six or more fragments, the largest  $\cdot 16 \times \cdot 075 \times \cdot 02$  m. At Nauplia.

17. *Marbling in the form of overlapping scales*:<sup>3</sup>

(i) Part of step or edging. Horizontal face,  $\cdot 033 \times \cdot 06$ , white. Vertical face,  $\cdot 07 \times \cdot 03 \times \cdot 013$  m., blue, red and yellow overlapping scales. At Nauplia.

(ii)  $\cdot 068 \times \cdot 085 \times \cdot 013$ . Similar pattern, red and white. At Athens.

See Rodenwaldt, *Tiryns*, ii. p. 63, n. 2.

(iii) = Vertical face of No. 13 (i).

18. *Fragment of step, with argonauts*:

(a)  $\cdot 098 \times \cdot 04$ . Pinkish-yellow stripe: spirals with yellow and red filling.

<sup>1</sup> Rodenwaldt, *Tiryns*, ii. Pl. IV.

<sup>2</sup> One of these fragments probably accounts for the supposed animal's head on the upper left-hand corner of 'Eφ. 'Aρχ., 1887, Pl. XI.

<sup>3</sup> As Rodenwaldt, *Tiryns*, ii. pp. 62-3.

(b)  $\cdot 105 \times \cdot 06$  m. Between an upper red and a lower blue-grey stripe, argonauts in black; both stripes outlined in black. At Athens.

### *Pottery.*

With the fresco fragments (A) we found a good deal of pottery which may be classified thus:

Middle Helladic, a fair amount of Matt-painted ware, Groups B. I. and II., and about the same quantity of plain polished M.H. ware, some of which might be classed as L.H. I yellow Minyan and rank as L.H. I.

Late Helladic I.-II., a fair amount and a few handleless cups of the type already often referred to.

Late Helladic III., painted ware: more of this than of the painted L.H. I.-II. ware, and with it two or three fragments of terracotta figurines; a good deal of indeterminate painted L.H. ware, most of which should probably be ranked as L.H. III.; a great deal of unpainted L.H. III. ware, including very many fragments of kylikes; a little coarse domestic ware, including the handle of a large pithos and several legs from three-legged cooking-vessels.

The general impression given by the finds on the surface in this area was that of a Hellenistic occupation and alteration of a layer which had been created in L.H. III. times by throwing down rubbish from earlier buildings during the reconstruction of the parts of the Palace above the terrace wall. Tsountas' suggestion<sup>1</sup> that the outer walls of the Palace were covered with fresco seems hardly feasible. The fresco fragments had presumably been stripped off the walls during repairs, alterations or redecoration. Similar cases are known from Tiryns and from Knossos. We can on this evidence assume the Pithos Area to have been made in L.H. III. times.

To test this still further we dug several pits through the terrace of grey earth down to rock. The principal tests were at the middle of the west edge of the Pithos Area, a little south-west of the southernmost pithos and along the north foot of the west wall of the Grand Staircase. The test in the west edge gave these results (see diagram, Pl. XXIV.).

For a depth of 1.75 from the level of the pithoi we found no pottery or any other remains at all. The trench was dug down through the grey earth already described, and nothing whatsoever was found in it. It is possible that this earth might be soft powdered rock like the very soft grey rock on the slope of the hill where the Cyclopean Tholos Tomb is.

<sup>1</sup> *Προκτίδα*, 1886, p. 74.

In the next layer, from 1.75 to 1.85 m. below the level of the pithoi, the earth changed to soft black earth well mixed with refuse, and here we found the following pottery :

Middle Helladic, Grey Minyan ware, four sherds.

Matt-painted Group B. I., five sherds.

Group B. II., eight sherds.

Group D. I. (light-on-dark on a red ground), two sherds.

Plain and polished ware, thirty-eight sherds.

Coarse domestic ware, a fair quantity.

This deposit seems to belong to the later part of the Middle Helladic age. The scarcity of grey Minyan ware, and the presence of two sherds of light-on-dark ware, one of which (Pl. XXXI. *d*) shows a very elaborate spiral paralleled by that on one of the dark-on-light sherds (Group B. II., Pl. XXXI. *g*), indicate that we have to deal here with a late rather than an early M.H. stratum. At this level, about 1.70-1.75 m. below the level of the pithoi, a floor of white clay was found, and consequently the pottery just described was found on or in the clay floor. It was much mixed with oyster-shells and bones of sheep and pigs, and therefore is the débris left by human habitation.

As we dug down, another white clay floor appeared at 2.15 m. below the level of the Pithos Area. In the black earth which lay above this floor we found more refuse, such as oyster-shells and the bones of sheep and swine, with a great quantity of vase fragments and many stones. The pottery can be classified thus :

Middle Helladic, Minyan ware, six very small sherds.

Matt-painted, Group B. I., eight sherds.

Group B. II., eight sherds.

Group B. III., one very fine sherd illustrated in Pl. XXX.

This is part (.32 m. long) of a large vessel shaped like a krater and is of exactly the same style as the vases of this group from the Sixth Shaft Grave.<sup>1</sup> We see on this fragment a flight of wild duck drawn for all their crudeness in a very vivid manner. The biscuit is grey in the centre, but reddish at the edges. It is covered with a well-polished slip varying in colour from yellow to pink. The ducks are drawn on this in thin grey-black for the wings and outlines, and in purple-brown for the bodies and inner lines. The tooth pattern on the lip is in dull grey and lined by purple-brown. These ducks closely resemble the similar birds on the vases from the Sixth Shaft Grave.<sup>2</sup> This fragment is of considerable

<sup>1</sup> Furtwängler-Loeschcke, *Myk. Tongefässe*, Pls. VIII., IX., X.; cf. Blegen, *Korakou*, pp. 28 ff.

<sup>2</sup> Furtwängler-Loeschcke, *op. cit.* Pl. IX.



importance, as it enables us to say that this deposit between the two floors is approximately contemporary with the Sixth Shaft Grave.

Polished and plain yellow, yellow-buff and red-buff ware, a great quantity; this includes goblets of a Minyan shape, but intermediate between the grey Minyan and the Ephyraean goblets (they are like Fig. 35); jugs with cutaway necks, kantharoi and large jars of a hydria type also occur. In general this plain and polished ware recalls the unpainted ware from the later M.H. and the L.H. I. strata of Korakou (*Korakou*, pp. 18, 43). There is one base from a jar of coarse reddish ware with a potter's mark consisting of three vertical strokes.

Late Helladic I., one piece. That there should be one fragment of L.H. I. pottery in this stratum is not inconsistent with the Sixth Shaft Grave, since one L.H. I. ewer<sup>1</sup> was found in it, though some think it is of Cretan fabric.

Below this clay floor there was another stratum of débris from human habitation, containing as before oyster-shells, animal bones and a quantity of pottery and many stones. This deposit went down to the native limestone rock of the acropolis, which here slopes in a general south-westerly direction. We dug this layer in two levels. The first—from 2.15 to 2.20 m. below the surface of the pithos area—yielded:

Middle Helladic, Minyan ware, grey, one sherd.

Matt-painted, Groups B. I. and II., eleven pieces, of which most belong to Group B. II.

Group D. I., light-on-dark, three sherds.

Polished and plain ware, a great quantity of the usual shapes just described.

The next layer, from 2.20 below the surface to the rock at 2.35 m. from the level of the pithoi; again gave nothing but M.H. pottery. This was:

Middle Helladic, Minyan ware, grey, one piece.

Matt-painted, Groups B. I. and II., twenty sherds, including one or two pieces apparently with added white paint.

Polished and plain ware, a great quantity, all of the characteristic shapes described above.

The general impression to be gathered from a study of this pottery and that yielded by other tests near by which verified the details just given, is that the whole stratum, including the two floor levels, belongs to the latter part of the M.H. period, and perhaps like the Sixth Shaft Grave just overlaps into the beginning of L.H. I. The scarcity of Minyan ware shows that it does not belong to the early part of the M.H. period, and the light-on-dark sherds confirm the view that this stratum with the two floor levels belongs to the end of the Middle Helladic Age.

<sup>1</sup> Fimmen, *Kretisch-Mykenische Kultur*, p. 88, Fig. 74.

The other trench, dug along the west face of the foundations of the west wall of the Grand Staircase, gave confirmatory results, but also yielded additional information about the dating of the staircase and of the yellow-grey earth of the Pithos Area, and their relations to one another. This trench was dug in five levels thus :

The first level from the surface (the level of the pithoi, about 66.40) to .70 m. down, produced a considerable amount of fragments of plain white stucco, and the following pottery :

Middle Helladic, Minyan ware, grey, three sherds.

Matt-painted, Group B. I., five pieces.

Group B. III., three sherds.

Plain and polished ware, twelve fragments.

Late Helladic I., five pieces.

Handleless cups, five fragments.

Late Helladic III., two sherds and six pieces of unpainted kylikes.

There were six painted sherds of L.H. ware which could not be more closely classified, and about forty sherds of plain ware of the same period, late rather than early in style. Finally, there were two small pieces of classical Greek pottery.

The second level, from .70 to 1.50 m. down, gave with a number of fragments of plain white or pale yellow stucco the following :

Middle Helladic, Minyan ware, two sherds.

Matt-painted, Group B. I., three sherds.

Group D. I., light-on-dark, one piece.

Plain and polished, including yellow Minyan, eighteen sherds.

Late Helladic I., five sherds.

Handleless cups, three fragments.

Late Helladic III., one piece.

There were also nine plain or indeterminate pieces of L.H. pottery and one Hellenistic sherd. The Late Helladic I. ware included the fine sherd with a leaf pattern on a spotted ground shewn in Pl. XXXI. *ϕ*; this seems to have been part of a bowl. In style and fabric it is unmistakable, and is consequently important for dating purposes.

The third level ran from 1.50 to 1.85 m., that is to say, it comprised the upper clay floor which here was at a depth of 1.50 about from the surface and the stratum directly beneath it. This gave :

Early Helladic, three sherds.

Middle Helladic, Minyan ware, grey, two sherds.

Matt-painted, Group B. I., nineteen pieces.

Group B. II., six sherds.

Group B. III., two sherds.

Plain and polished ware, a great quantity, which includes all the usual shapes, both goblets of the intermediate type, Fig. 35, and of the Yellow Minyan shape (*Korakou*, Fig. 58), kantharoi, and jugs. The ware as usual varies in colour from yellowish to reddish-buff.

Late Helladic I., one sherd.

Among the sherds of Group B. I. jugs of a hydria type were common; two such pieces are seen in Pl. XXXI. *h, i*, which might from their spiral patterns be classed as Group B. II. Typical sherds of Group B. II. from this stratum are shewn in Pl. XXXI. *a, b, f*.

In this layer, at a depth of 1.70 m. from the surface, a low wall appeared, and since the lower floor mentioned above was not found on the south side of it, see the diagram Pl. XXIV., it was probably the floor of some building of which this wall was part.<sup>1</sup>

The fourth level, from 1.85 to 2.00 m. from the surface, gave :

Early Helladic (?), three sherds.

Middle Helladic, Minyan ware, grey, six pieces.

Matt-painted, Group B. I., twenty pieces.

Group B. II., fifteen pieces, of which two characteristic sherds are illustrated in Pl. XXXI. *c, e*.

Group B. III., one sherd.

Group D. I., light-on-dark with white and purple-red on a dark ground, two pieces.

Late Helladic I., one sherd.

Late Helladic III., three sherds.

The fifth and last level, which ran from 2.00 m. to the rock at 2.15 m. deep, gave the following :

Middle Helladic, Matt-painted, Group B. I., twelve pieces.

Group B. II., seven sherds.

Group B. III., one sherd.

Minyan ware, grey, three sherds.

Plain and polished ware of the usual type, fifty-two pieces.

The stratification here from the upper clay floor to the rock corresponds exactly with that observed in the other test, but the conditions of the upper strata, that is, from the surface down to the upper floor, are quite different. The presence of L.H. pottery with fragments of fresco against the face of the wall points to a disturbance of the grey earth of the Pithos Terrace. We therefore carefully examined the stratification along the face of the staircase wall foundations down to the level of the upper

<sup>1</sup> The clay floor of this trench (corresponding to the upper floor of the trench described above, p. 173) is above this wall. To the north of the wall was found a floor corresponding to the lower floor, pp. 173, 174.

clay floor, to see how far this disturbance affected the soil of the Pithos Terracé. We found that this disturbance did not extend further than .50 m. from the face of the wall westwards and did not go any lower than 1 m. or 1.50 m. from the surface, where the upper part of the foundation wall rests on a loosely-built wall or rather fill of rough stones which project some .50 m. from its face. The disturbed section is sharply divided from the rest of the soil of the Pithos Area, and the change in character of soil and deposit is very abrupt (see diagram, Pl. XXIV.).

We have presumably to deal here with the remains of the trench dug when the foundations of the west wall of the staircase were laid (what the Germans call a *Baugrube*). Consequently, the finds in this narrow section become of the highest importance for dating the staircase, for they are the rubbish thrown in to fill up the surplus width of the foundation trench after the foundations were laid. This rubbish then should presumably be contemporary with the building of the staircase. We dug two further tests in this narrow section with these results :

*Test A.* From the surface of the Pithos Area to .50 m. deep.

Middle Helladic, Matt-painted, Group B. I., three sherds.

Late Helladic I., two pieces

Plain ware (yellow Minyan), two sherds, and a large number of fragmentary handleless cups.

Late Helladic III., four sherds, and four pieces of unpainted kylikes and other unpainted ware.

There was also much coarse domestic ware and many pieces of plain white stucco.

At a depth of .50 m. adhering to the face of the wall were a great many fragments of plain white stucco and this pottery :

Late Helladic I., two pieces.

Late Helladic II., two pieces of the alabastra <sup>1</sup> typical of this period and a great quantity of handleless cups. There were five stems of short-stemmed drinking-cups of a primitive kylix type and much plain and coarse domestic ware.

From .50 to 1.00 m. there were two sherds of painted L.H. ware, about fifteen fragments of handleless cups and much L.H. plain ware, which did not include any kylikes.

*Test B.* From the surface to .90 m. deep.

Early Helladic (?), one sherd.

Late Helladic I., one sherd.

Handleless cups, sixteen pieces.

<sup>1</sup> Similar to those from Tombs 515, 518 and 529.

Late Helladic III., three fragments of unpainted kylikes and one with a murex pattern.

There was also a good deal of unpainted pottery of L.H. style, and a number of pieces of plain white stucco.

From .90 to 1.50 m. deep we found :

Middle Helladic, Matt-painted, Group B. II., two sherds.

Plain and polished ware, a little.

Late Helladic I., two sherds and part of a large bath.

Handleless cups, about twenty pieces.

There was also a good deal of plain L.H. ware.

Finally, lying on the surface of the upper clay floor we found several M.H. sherds. Below the upper floor level, except in the disturbed section, nothing but M.H. pottery was found, and between the two floor levels also nothing but M.H. pottery except for the one sherd of L.H. I. ware already mentioned. These M.H. deposits everywhere yielded a great number of oyster and mussel-shells, especially by the side of the M.H. wall, and broken and split bones of animals such as sheep and swine.

As the two clay floors come at the end of the Middle Helladic period we must conclude that the grey earth of the Pithos Area Terrace was laid down not earlier than the end of M.H., or early in L.H. I. But naturally it may have been laid down later in the L.H. period. To judge by the rubbish-filled trench that runs along the west face of the west wall of the staircase, it seems that the staircase is later in date than the Pithos Terrace, since it has disturbed it. This trench contains L.H. I. and II. pottery, among which the handleless cups are again prominent, and a little L.H. III. Taking this evidence into consideration with that derived from the tests below the lobbies of the staircase we may make the following suggestion.

#### DATE.

At the end of the Middle Helladic period the grey earth was laid down to form a terrace, with what object is not known. Possibly about the same time a fill of rough limestone blocks (see above, pp. 151 ff.) was thrown on to the space adjoining the Pithos Area to the south-east, but whether this fill was designed to form the foundation of a staircase or not is uncertain. Probably some structure belonging to the first (L.H. I.) Palace stood on this fill. Later, at the end of L.H. II. or early in L.H. III., reconstruction was undertaken here, and the west wall of the staircase was built, and for this purpose extra foundations were laid, thus cutting into the

grey earth of the Pithos Area, for the L.H. III. sherds from the trench along the west wall, though few, shew that the building of this wall took place in L.H. III. Had the building been done late in L.H. III. we should have expected more L.H. III. pottery. As it is, the considerable quantity of L.H. I. and II. pottery with the handleless cups, in contrast to the few L.H. III. sherds, shews that the L.H. III. period was just beginning. The many fragments of plain white and yellow fresco, which are unburnt, shew that the Palace underwent some alterations and reconstruction at this time. We could, of course, adopt another line of argument and cut the Gordian knot by branding the L.H. III. sherds as intrusive, and assuming that they had insinuated themselves into this foundation trench at some later time. Such an argument would merely burke the problem and not solve it; besides, we have to take into consideration the evidence from the Pillar Basement.

#### 4. THE ANTEROOM AND THE PILLAR BASEMENT.

From the uppermost landing of the Grand Staircase,<sup>1</sup> which would have been directly over the West Lobby (63), we reach the space (61) in front of the Room of the Throne (52). Unfortunately this area has suffered much from denudation, and even when Tsountas first excavated here there was not much soil over the ruins.

##### ANTEROOM TO ROOM OF THE THRONE.

To the north the space is bounded by the twin thresholds of conglomerate which mark the entrance to the Room of the Throne. On the east it is shut off from the Court by a wall pierced by a doorway with a sill of red sandstone, a very unusual material. On the south it is now open, but was originally enclosed on this side by the north wall of the staircase. To the west it is also now open and extends as far as the "Old Wall," which forms the eastern limit of the Pithos Area (50, 62) at the south end of the West Terrace Wall. This Anteroom to the Room of the Throne is thus an irregular quadrilateral. The line of its west wall cannot now be ascertained. In the north wall between the twin thresholds probably stood a square pier of rubble masonry. This seems to have collapsed in the conflagration which destroyed the Palace and now lies prone projecting

<sup>1</sup> See above, p. 160.

southwards between the twin thresholds like a low wall. The red sandstone threshold in the east wall seems far too small—the door opening is only about 1.20 m. wide—to have been either the main means of communication between the Grand Staircase and the Court or between the latter and the Room of the Throne. It is very likely <sup>1</sup> that in the latest phase of the Palace, when conglomerate thresholds were the rule, this entrance was blocked up and another and larger door provided more in keeping with the importance of the communication it afforded. Tsountas <sup>2</sup> has already suggested that an enormous sill of sawn conglomerate (Pl. XXII. *d*), which, according to Steffen's plan <sup>3</sup> (where it figures as *antiker Baustein*) and to Tsountas' particulars, lay just over the big poros block (level 71.07) in the foundations of the south end of the west wall of the Court, was in fact the threshold between the Court and the Anteroom. The sill was unfortunately pushed down the hill to prevent it falling on the workmen clearing the Grand Staircase during Tsountas' excavations. Its original position is known and it had the same alignment as the west wall of the Court. It is broken, but is too big to have been moved far and measures 1.67 m. long, .35 m. thick and 1.21 m. wide. There is a sawn door ledge cut on each side, and at the end of one of the ledges there is a hole for the insertion of a pivot. We know the Court extended as far south as this point from the evidence of the cement floor, for it reaches the line of big blocks (59) which probably mark the foundations of its south wall. If then we follow Tsountas in placing the entrance to the Court here, it would balance the other entrance (49) from the Western Portal (45) in the north-west angle. It also corresponds with the plan of the Palace at Tiryns, where the principal entrance to the Court from the outer court and propylaea is in the south-west angle.

This Anteroom or forecourt to the Room of the Throne is floored with cement resting on a layer of crude brick (.16 m. thick), which in its turn is laid above a heavy fill of rough limestone blocks. We cannot now be sure whether it was roofed or not; perhaps it was only partly roofed over. A column may have stood somewhere in front of the rubble pier between the twin thresholds, for we found a broken column base of conglomerate lying on top of the fill, but not *in situ*. Such a column would have helped to carry the roof of a portico before the thresholds.<sup>4</sup> The rest of the

<sup>1</sup> Cf. Dr. Holland's observations below, p. 275.

<sup>3</sup> *Karten von Mykenai*, Pl. II.

<sup>2</sup> *Πρακτικά*, 1886, pp. 63, 64.

<sup>4</sup> See further, below, p. 275.

Anteroom was probably not roofed, because it is drained by the small outlet that runs through the east wall into the Court and so makes the beginning of the Main Drain <sup>1</sup> (58).

#### THE PILLAR BASEMENT.

We dug through the fill below the floor in hopes of finding something which would give a date for its construction and discovered clear evidence of a disused basement below (Pl. XXXII). This was bounded on the north by a wall once faced with mud plaster well mixed with chaff, which runs directly under the twin thresholds to the Room of the Throne, and on the east by a similar wall which is below and a little in front of the wall that separates the whole of this space from the Court. The north wall of the basement apparently had a wooden beam set in it not far below the thresholds, about 1 m. approximately.<sup>2</sup> In the north-east angle below and just to the east of the eastern threshold, at a depth of about 1.35 m. from the top of the threshold, there is a drain built with small limestone slabs about .30 m. square, running from the north southwards through this wall (Pl. XXXII. *b*). This drain does not continue through the limestone fill and therefore presumably should be earlier in date.

About the centre of the basement at level 68.69 we found a square pillar of rubble masonry, much burnt and damaged, but still about 1.30 m. high. It is about 1.10 m. square, and rests on a dressed block of conglomerate about .35 m. high (Pl. XXXII. *a*). A white clay floor lay round the Pillar Base to its west and north, and was about .05 m. thick and rested on a layer of black earth and clay in places as much as .30 m. thick. This stratum was spread partly over the rock, partly over a fill of rough limestone blocks, and contained a number of small fragments of fresco,<sup>3</sup> a quantity of split and broken animals' bones, chiefly of sheep and swine, some oyster and other shells, and a great quantity of pottery which can be classified thus :

Middle Helladic, Matt-painted, Group B. II., three sherds.

Late Helladic II. (?), handleless cups, forty-four fragments.

<sup>1</sup> See below, p. 202.

<sup>2</sup> Owing to the insecure state of the upper part of the wall no accurate measurements were possible.

<sup>3</sup> This consisted of : (i) coarse plaster, red ; (ii) finer plaster, red, black and white, all burnt.



Late Helladic III., painted sherds, including kylikes and stirrup vases, fifty-seven pieces, and part of a jug with a fine leaf pattern; the better pieces are shewn in Pl. XXXI. *j-o*.

Unpainted kylikes, at least forty fragments.

There was also a small amount of coarse domestic ware, including pieces of three-legged cooking-pots, a great quantity of plain L.H. pottery, practically all of which can hardly be dated later than the beginning of L. H. III. There were also two conical spindle whorls with bevelled bases, .016 m. of terracotta, one complete and one broken, similar to those from the earliest interments in Tomb 517.<sup>1</sup>

This deposit is most important, because it gives us a *terminus post quem* for the building of the Pillar Basement, and consequently for the whole section of the Palace to which it belongs. To judge by the burnt condition of the Pillar Base itself and of the walls to the north and east of it, this basement was destroyed by fire, perhaps an accidental fire that damaged part of the Palace. The Pillar Basement was thereafter abandoned and filled in with rough limestone blocks, sunk among which we found one broken threshold of conglomerate, partly fashioned by the saw. In the fill we found some pottery.

In the western part in the upper part of the fill we found six L.H. III. sherds, two fragments of handleless cups, one Proto-Corinthian and one Hellenistic sherd. In the lower part of the fill there were four painted and many unpainted L.H. III. sherds, including kylix fragments, and a piece of a Hellenic stamped pithos.

In the eastern part below the floor of the Anteroom (60) we found three handleless cups, one L.H. III., and one Geometric sherd, a quantity of unpainted ware that seems to be mainly L.H. III., and some bits of coarse plaster much burnt.

Lastly, at the west end of the drain which begins just on the west side of the wall separating this area from the Court (level 71.32) and then runs obliquely across the southern part of the Court drained by it, we found the following :

Middle Helladic, Matt-painted, Group B. II., one sherd.

Late Helladic II., one sherd.

Handleless cups, three or four pieces.

Late Helladic III., three sherds of painted ware, part of a female terracotta figurine, and a good amount of unpainted ware, including kylikes.

<sup>1</sup> In early tombs (L.H. I.-II.) terracotta whorls are found, in late (L.H. III.) tombs steatite whorls; see below, p. 385.

This drain could not have been laid before the Pillar Basement was filled, therefore the evidence of the pottery found in it shews that the filling in of the Pillar Basement took place in L.H. III. times.<sup>1</sup> We know from the evidence of the pottery found below its floor that the Pillar Basement itself was made early in L.H. III. times, and was apparently not long in use. What then were its relations to the Grand Staircase and to the west wall (or "Old Wall") which supports the Pillar Basement

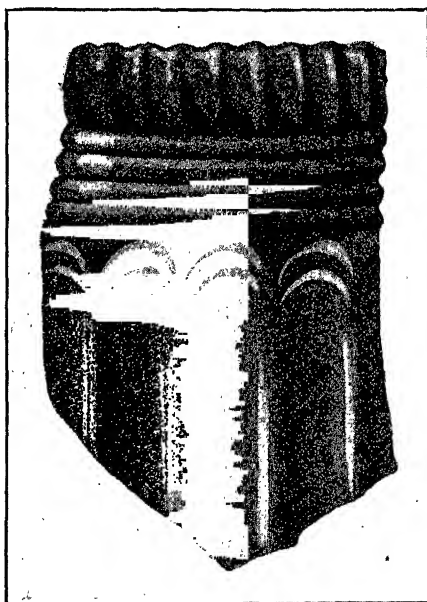


FIG. 36.—PILLAR BASEMENT: FRAGMENT OF FUNNEL-SHAPED RHYTON. (Scale 2:3.)

above the Pithos Area? A glance at the plan<sup>2</sup> shews that if the walls of the Pillar Basement followed the lines of the wall as they stand now on its west and south it would have had an extraordinary shape.<sup>3</sup> It seems incredible that anyone would build the Grand Staircase obliquely instead of parallel to the walls of the Pillar Basement. Further, the north

<sup>1</sup> The post-Mycenaean sherds clearly cannot be taken into account, as we should otherwise have to assume the filling in to have been done in Hellenistic times. The floor of the Anteroom is not intact, and so later pottery could penetrate into the gaps in the fill.

<sup>2</sup> Cf. Pl. XXIV, and Fig. 38.

<sup>3</sup> It must be confessed that in the final phase of the Palace when this space (61) served as Anteroom to the Room of the Throne, it would still have had a curious shape.

wall of the staircase stands even now high above the floor of the Pillar Basement. It has no face towards the Pillar Basement, and acts merely as a revetment for the fill behind it. In the fill directly behind this wall we find M.H., L.H. II. and L.H. III. ware and one piece of incised pottery, probably contemporary with Proto-Corinthian ware. There was also a number of fragments of fresco, white, blue-and-white and dull red, and the piece of the fine fluted rhyton in red stone seen in Fig. 36. Since behind this wall there is nothing but the limestone fill which was poured into the Pillar Basement after its disuse, we can only assume that the Grand Staircase in its present form is later in date than the Pillar Basement, and come to the conclusion that as the Pillar Basement was made early in L.H. III., the Grand Staircase must fall some time later in that same period; a conclusion which agrees with the observation made above when we discussed the staircase.

The north wall of the Pillar Basement at its west end does not bond with the top of the " Old Wall " (the section of the Terrace wall which here forms the west limit of the Pillar Basement, and looks down on the Pithos Area). Neither does this north wall go down to the rock, for it rests on the fill below the floor of the Pillar Basement. That fill, however, is held up on the west by the ' Old Wall ' referred to. The ' Old Wall ' then must either be contemporary with or earlier than the Pillar Basement. It might at first sight be tempting to think that the West Terrace Wall at the set-back by the southernmost of the five pithoi was once prolonged to the south and met the north wall of the Pillar Basement at right angles, and that after the collapse of the Pillar Basement the ' Old Wall ' was built to retain the ruins. This hardly seems likely. The rock just to the south of the southernmost pithos slopes down sharply and there are no remains of any building on it. Secondly, if the north wall of the Pillar Basement had bonded with this hypothetical extension southwards of that portion of the West Terrace Wall we should expect the north wall of the Pillar Basement to be founded on the rock and not on the fill.

The more probable view is perhaps this. The ' Old Wall ' is really an old terrace wall of an early stage (perhaps L.H. I.) of the Palace. Early in L.H. III., when some rebuilding and extension took place, the Pillar Basement was built on part of the level it held up. Its west wall would then have run at right angles to the north wall and made the Pillar Basement a long parallelogram with the Pillar Base not quite in

the centre, but about 1 m. nearer its west wall than its east; or perhaps another Pillar Base stood just to the east of the existing one, so that the two together occupied the centre of the basement. Then we can assume the Pillar Basement to have been bounded on the side towards the staircase by a wall no longer in existence at right angles to its east wall, not oblique like the present north wall of the staircase. Some little time later, a fire occurred in this part of the Palace, in which the Pillar Basement suffered together with whatever building (perhaps an earlier staircase) stood on the site of the existing Grand Staircase.<sup>1</sup> In the ensuing reconstruction the Pillar Basement was abandoned and filled in up to the level of the thresholds of the Room of the Throne, and in front of this the Grand Staircase was built on the pre-existing foundation of fill. The unburnt fresco fragments found in the Pithos Area would have been stripped from the walls and have been thrown down there during the alterations which took place when the Pillar Basement was built. The foundation trench along the outside of the west wall of the staircase, and the L.H. III. ware found in it, indicate the construction of the staircase during the repairs after the fire. This agrees well with the observations already<sup>2</sup> recorded, that though the fill on which the staircase stands seems to be earlier, yet its transformation to its present shape occurred in L.H. III.

## SUMMARY OF EVIDENCE FOR DATE.

This explanation does not clash with any of the evidence either of the pottery or of the actual ruins.

The most important points in the first class are, (1) the L.H. I. pottery below the floors of the lobbies of the staircase, (2) the L.H. III. and other earlier pottery from the foundation trench of the west wall of the staircase, and (3) the L.H. III. pottery from below the clay floor of the Pillar Basement.

In the second class the outstanding points are that the 'Old Wall' antedates the rest of the West Terrace wall, and that the Pillar Basement was damaged, disused and filled in not long after its first construction.

That the Pillar Basement dates from the beginning of L.H. III. is an

<sup>1</sup> Perhaps on its south side the Pillar Basement was an open portico supporting a terrace above; see below, p. 275. The door to which the red sandstone sill belonged, would have given access to this terrace from the Court.

<sup>2</sup> Pp. 151 ff. above.

important fact too for the general history of the Palace. It suggests that the whole part of the Palace, of which it is one unit, should be dated to the same period. The walls of the Pillar Basement clearly belong to the same scheme as the Room of the Throne, the Court and in all probability the Megaron, for the Court and the Megaron hang together. The Megaron could not have been built unless the Court was there, for its plan and position prove that it forms part of the same system as the Court. The latter from the plan, and from the fact that part of its west wall rests on the east wall of the Pillar Basement, again clearly forms part of the same design as the Pillar Basement and the Room of the Throne. In fact, in the last stage of the Palace the entrances to the Court and Room of the Throne from the Grand Staircase depended on the Pillar Basement having been filled in. If then the Pillar Basement was built early in L.H. III., and the ceramic evidence is decisive on this point, the Court and all that goes with it cannot be earlier; that is, they were built not earlier than the beginning of the fourteenth century B.C.

#### 5. THE ROOM OF THE THRONE.

Over the twin thresholds of conglomerate <sup>1</sup> on the top of the north wall of the Pillar Basement one enters a square room (52) known as the Room of the Throne. It was floored with painted stucco laid above a stratum of earth and small stones resting in turn on a fill of rough limestone blocks thrown in on top of the native rock. The stucco with its backing is about .025 m. thick, and the layer of earth below it is some .20 m. thick. We dug a test to the rock, which was found at 1.20 m. below the floor, to see if there was any room here corresponding to the Pillar Basement. No such room was found, and apparently the north wall of the Pillar Basement serves as a retaining wall for the stone-fill on which the Room of the Throne is erected. In the earth below the floor we found a few fragments of fresco similar in style of those of the Pithos Area and unburnt, and the following pottery:

Early Helladic (?), one.

Middle Helladic. Matt-painted, Group B. I., eight sherds.

Plain and polished ware, including some yellow Minyan which may be L.H. I., twenty-four sherds.

<sup>1</sup> The western threshold has a pivot-hole for a door, but no certain pivot-hole can be seen in the eastern threshold.

Late Helladic I., eleven sherds.  
Handleless cups, three fragments.

As this earth is not naturally stratified, but an artificial layer laid down over the stone-fill, it is not easy to draw any conclusions from it. As far as this evidence goes, this room might have been built at the end of L.H. I.; but it is clearly part of the main scheme of the Palace, and the fixing of its date must depend on that of the Court, the Megaron and the Pillar Basement.

Tsountas found a tiled drain beneath this room. Its source is unknown; it runs obliquely under the south half of the room from west to east, passes under the wall which separates this room from the Court, and its subsequent course has not been ascertained. No connection between it and the main drain (58) or between it and the north-south drain east of the red sandstone threshold has yet been found. The tiles of which the drain is composed are shaped like an inverted  $\Pi$  and roofed with thin slabs of limestone. The tiles are .20 m. high and .22 m. wide inside, the actual thickness of the walls being .02 m. Drains of this type are not uncommon in Mycenaean buildings. Other examples have been found at Mycenae and at Tiryns,<sup>1</sup> and one was discovered in the American excavations at Zygouries near Kleonai, also in an L.H. III. building.

The painted stucco floor<sup>2</sup> is very badly damaged and is now only preserved round the edges of the room, though traces of it can be found nearly all over it.

Against the north wall is an oblong space, .82 m. from east to west, 1.08 m. from north to south (Pl. XXXIII. a). It was originally sunk about .015 m., the depth of one layer of plaster, below the level of the rest of the floor, as can be seen by the remains of plaster on the west side of the oblong. On the south is a plaster rim projecting .02 to .03 m. above the surface of the floor, broken at the top, and about .015 m. wide; it is preserved for the length of .17 m.

The floor to the west is ornamented against the wall with a rosette pattern (Pl. XXXIII. a). The rosettes, which are drawn free-hand, are blue and white with red centres;<sup>3</sup> they are on a reddish-yellow ground

<sup>1</sup> Schliemann, *Tiryns*, p. 234; cf. also *Phylakopi*, p. 61, Fig. 57.

<sup>2</sup> Tsountas, *Πρατικά*, 1886, p. 68.

<sup>3</sup> Rodenwaldt, *Jahrb.* 1919, p. 106, notes that there were black markings on the blue similar to those on the rosettes; cf. *Tiryns*, ii. Pl. VIII.

between blue stripes. Beyond are first white stripes, then red. The whole border measures about  $\cdot 14$  m. : there may have been other details now lost.

The oblong itself is undecorated, but was bordered at the side by a blue stripe between red lines, and beyond, at a distance of  $\cdot 07$  m., by an incised line. This is preserved on the west; on the east the upper coating of plaster is lost.

The wall above the oblong is red; elsewhere it appears to have been white with a dark stripe below, but is too badly preserved for us to judge with certainty.

The sunk oblong must have held some object, and the parallel case of the larger Megaron at Tiryns<sup>1</sup> suggests that the object was a throne,<sup>2</sup> standing on a base with a plaster covering of which the rim mentioned above was part.

This room might have served as an audience chamber where the ruler of Mycenae received envoys and guests introduced up the Grand Staircase. This suggestion finds support in the recent discovery of a similar audience chamber just within the west entrance at Knossos.<sup>3</sup>

To the west of the Room of the Throne in clearing the top of the fill (51) thrown in behind the West Terrace Wall we found a few fragments of fresco as follows :

(a) Coarse fresco, *c.*  $\cdot 02$  to  $\cdot 03$  thick, some with traces of colour, some obviously burnt, some doubtful.

(b) Fine fresco, *c.*  $\cdot 004$  thick. Possibly burnt.

(c) Fragment of spiral B. 12 (i) unburnt, of which part was found by Tsountas, and several pieces by ourselves. The latter came from the Pithos Area, which was probably the source of Tsountas' fragments too,<sup>4</sup> though some might easily have been found here above the West Terrace Wall, and to the west of the Room of the Throne.

## 6. THE COURT.

We believe the entrance from the head of the Grand Staircase into the Court lay through the Anteroom (61) over the large conglomerate threshold<sup>5</sup> (Pl. XXII. *d*) in the south-west angle of the latter. That the

<sup>1</sup> Described, Rodenwaldt, *Tiryns*, ii. p. 223.

<sup>2</sup> Tsountas considered it was a hearth, *Πρακτικά*, 1886, p. 68.

<sup>3</sup> Evans, *Antiquaries' Journal*, ii. p. 323.

<sup>4</sup> See p. 162, above; the fresco is B 12 (i).

<sup>5</sup> See p. 180 above.

entrance to the Court should be placed in one angle is analogous to the inner Court at Tiryns, where the entrance is in the south-west corner. The visitor, on passing this threshold, which supported a door, found himself in a large rectangular Court over 15 m. long and nearly 12 m. wide. It lay open to the sky and into it looked windows from the apartments and corridors adjoining on the west, north and east, for which it served as a kind of light shaft. This part of the Palace had at least two storeys, and a light shaft, therefore, was a necessity. The south wall of the Court no longer exists owing to its position on the edge of the sloping hillside. On the plan, Pl. II., the extreme extent of the cement floor of the Court towards the south is shewn, and just beyond this lies a row of large limestone blocks (59). These rest on a heavy mass of fill packed in behind the north wall of the staircase and run parallel with the north wall of the Court. It is very probable that they formed part of the foundation of the south wall of the Court. It seems indeed strange that an architect building on this magnificent site should have deliberately built a wall across the south side of the Court and so shut off the wonderful view of the Argive Plain which the modern traveller enjoys from this spot (Pl. XXXIV. *b*). The north wall and roof of the staircase must in any case have risen above the level of the floor of the Court. The lords of Mycenae were probably more concerned for their comfort, which would depend on privacy and safety, than with the scenery. In any case they would have enjoyed exactly the same views, perhaps to better advantage, from the loggias and flat roofs of the upper storey of the Palace.

The east side of the Court is the front of the Megaron.<sup>1</sup> The north is formed by one continuous wall running from the north anta of the Porch of the Megaron (the so-called *aithousa*, 55) to a threshold in the north-west angle of the Court, where a corridor coming from the Western Portal enters over a threshold of sawn conglomerate. Behind the north wall of the Court runs the South Corridor (37) which leads from the Western Portal towards the Domestic Quarters, and rises gradually from west to east. Thus the north wall of the Court served in a way as a retaining wall for this South Corridor. This wall (Pl. XXXIV. *c*) is built of rubble faced with ashlar masonry in poros. Above the lowest row of ashlar blocks, which all have dowel-holes on their upper edges, ran a wooden

<sup>1</sup> See below, pp. 232 ff.



beam.<sup>1</sup> This has now perished, for the whole of this wall has been much damaged and the stones themselves disintegrated by some violent fire, probably that which destroyed the Palace. In the middle of the wall is a set-back which may have had a structural purpose in connection with the arrangement of the roof and windows.<sup>2</sup> To the east of this set-back most of the ashlar work of poros has disintegrated and fallen away owing to the wall falling forwards during the conflagration. Enough, however, is left, including the whole of its lowest course, to make it certain that this section also was faced with ashlar work in poros.<sup>3</sup> In the west half of the wall the ashlar still stands to a height of about 2.50 m. Many of the blocks have on the inner edges of their upper surface sinkings for dowels of a half double-axe shape. As in the case of the west wall at Knossos<sup>4</sup> and that of the double ring of slabs of the Grave Circle,<sup>5</sup> these undoubtedly served to keep the two faces of the wall vertically parallel to one another, and at the same time helped to prevent the facing blocks of poros from falling away. The uppermost block still *in situ* has a small rectangular dowel-hole towards the outer edge of its upper surface. Dr. Duncan Mackenzie has pointed out that this was to fasten a horizontal wooden beam which may have served as a window-sill, as in the ashlar work in the west wall of the Grand Staircase, or may have been merely a reinforcing beam like that in the lower part of the wall. Such a window, like the somewhat similar window on the staircase by the Queen's Megaron at Knossos,<sup>6</sup> would serve to light the South Corridor behind, and the chambers entered from it. We could then supply a similar window in the ashlar work of the east part of this north wall. This window, however, must have been at a slightly higher level in order to suit the rise in the level of the floor of the South Corridor (see the suggested reconstruction in Fig. 37). The roof of the South Corridor would have been in a series of horizontal steps. The set-back already noticed probably marks the position of one such step, for the increased height of the wall should demand increased thickness.

<sup>1</sup> As at Tiryns; Schliemann, *Tiryns*, pp. 255 ff.

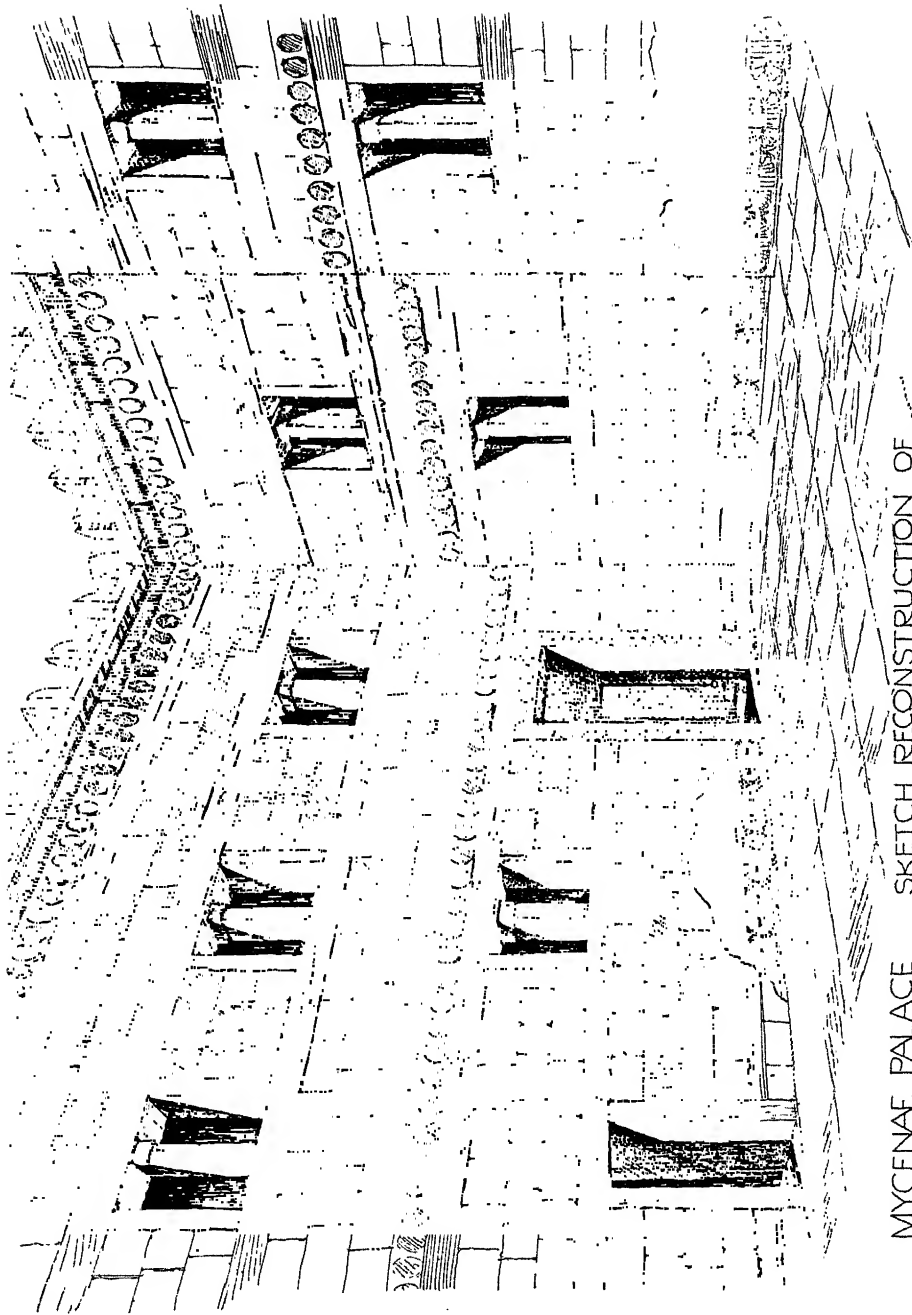
<sup>2</sup> See further below; cf. Fig. 37 and Pl. XXXIV. c.

<sup>3</sup> Rodenwaldt's difficulties (*Jahrbuch*, 1919, pp. 93 ff.), owing to the apparent absence of ashlar facing to the east part of this north wall, need therefore no longer trouble us.

<sup>4</sup> Evans, *Palace of Minos*, i. p. 128, Fig. 95.

<sup>5</sup> See above, p. 112.

<sup>6</sup> Evans, *Palace of Minos*, i. Figs. 239, 240.



MYCENAE PALACE SKETCH RECONSTRUCTION OF  
NORTH WEST ANGLE OF-COURT

FIG. 37.

The ashlar work of the west part of the wall ran as far as the north-west angle of the Court. Its apparent stop just short of the angle is due to the disintegration of the blocks in the fire. Careful examination reveals the existence of much-damaged poros blocks reaching to the angle. Apparently the whole of this ashlar work was in the latest period covered with painted stucco. The fire, however, has so discoloured and calcined it that no traces of the pattern are now visible except at the bottom of the lowest row of poros blocks on the east. Here one can see clearly how far the line of burning came down the wall. It seems that the small piece of stucco which has preserved its design was protected by the fallen débris from the upper stories. The pattern was a belt of the favourite Mycenaean rosette and triglyph design like that in the north-east angle of the porch of the Megaron (see below, p. 235). The lowest row of poros blocks below the horizontal wooden beam are much blackened, whereas those above, though much damaged, are brown. The question arises, Was this wall twice damaged by fire? This is possible. An earlier fire, perhaps other than that which destroyed the Pillar Basement and led to its being filled in, damaged part of the Palace here. On reconstruction the upper part of the wall was repaired. The destruction of the wooden beam would render this inevitable, while the lowest row of poros blocks though damaged remained in place; the whole was then covered with painted stucco, a proceeding which also served to conceal the traces of the fire. A further suggestion may be made as confirming this view. The whole Court is paved with a thick layer of excellent white cement, hard and firm like the corresponding pavement in the courts at Tiryns. Later this cement floor was for some reason or other covered all over with a layer of painted stucco. Though this is now only preserved in a much-damaged and burnt condition under the north wall, yet there are clear signs that it extended all over the Court. Perhaps the same fire which damaged the north wall also damaged and discoloured the cement floor of the Court, and so after the repairs it was covered with painted stucco to hide the signs of the disaster. It seems odd that walls and floors which were exposed to the weather<sup>1</sup> should have been covered with such perishable ornament as painted stucco.

<sup>1</sup> Rodenwaldt, *Jahrbuch*, 1919, p. 95, assumed that the whole Court was roofed over in the period contemporary with the decoration in question; this was before the removal of the walls of later date from the Court conclusively proved the absence of the supports necessary for a roof.

In an open court this stucco could not have lasted long even on the sheltered north side and therefore must have been laid down only a comparatively short time before the destruction of the Palace, to the latest phase of which it thus belongs.

#### THE PAINTED STUCCO FLOOR.

This stucco, consisting of painted squares, is preserved against the north wall as far as the return west of the staircase. Its total length is 11.9 m., its greatest depth 2.55 m., but it must have covered the whole floor. It lies directly on the cement floor which was the original floor of the Court in its present form.

Rodenwaldt examined it in 1914, and published a description and suggested reconstruction in the *Jahrbuch* for 1919. In 1920 and 1921 we examined it again, and owing to the removal of walls of a later period,<sup>1</sup> and other débris which encumbered the area of the Court, were able to make some important discoveries. The fresh evidence, especially with regard to squares Nos. 3 *b*, 4 *a*, 7 *a*, and 8 *a*, does not bear out Rodenwaldt's reconstruction, and suggests the new one published on Pl. XXXV. Between 1914 and 1920, however, some pieces from the eastern end of the floor were lost, including the scanty remains of square No. 1 *c*, a loss particularly unfortunate, as No. 1 *c* is one of the places where our conclusions and Rodenwaldt's differ.

The squares are coloured (from right to left) yellow, blue, red, blue; the sequence repeated in each line one square further to the right. They are bordered by red lines about .05 m. wide with incised edges, and vary remarkably in width. The decorator used no measure apparently, and the last square at the west end is not half the average width. Patterns are drawn on the squares in red, white and black. The surface is chipped, burnt and discoloured.

It will be seen that wherever the pattern can be definitely traced it reappears in the second row on squares of different colours, removed two squares horizontally and one vertically, like the knight's move in chess. This gives the key to the reconstruction, which is in accordance even with the squares of which the patterns are less distinctly marked, with the exception of No. 1 *c* in the third row seen by Rodenwaldt, but not by ourselves.

<sup>1</sup> Probably the period of Geometric pottery; Tsountas, *Πρακτικά*, 1886, p. 62.

Nos. 2 *a*, 4 *b*, 6 *a* and 2 *c* have been reconstructed with a wavy line of the type of imitation marble, a combination of that on the Tiryns floor,<sup>1</sup> and that on a wall fragment from Tiryns.<sup>2</sup> Such a pattern would leave traces in the form of the 'concentric bows' mentioned by Rodenwaldt in connection with Nos. 2 *a* and 2 *c*, as well as of the *Wellenlinien* noted by him on No. 4 *b*.<sup>3</sup>

At square No. 7 *a* the sequence is interrupted by the diamond pattern : it starts afresh presumably with the circles on square No. 8 *a*, but the scale pattern on the small square No. 11 *a* is in correct sequence with the order of squares Nos. 1 *a* to 6 *a*, not with the order of squares Nos. 8 *a* to 10 *a*. Perhaps the artist decorated the end square, No. 11 *a*, before the pattern was interrupted at No. 7 *a*. This interruption, curious though it is, may be explained by the fact that it occurs exactly opposite the setback in the wall discussed on p. 190.

In the illustrations on Pl. XXXV. the squares on which the patterns are certain are drawn with a darker wash, those on which the patterns are inferred are drawn with a lighter wash. This gives the reader the opportunity of following (i) the 'knight's move' on squares 1-7, and (ii) the broken sequence of squares 7-8 : also of suggesting, if he wishes, alternative plans for the more hypothetical part of the floor west of square 7.

#### *Description of Squares.*

##### *First Row :*

1 *a*. Yellow ground : spots with red centre surrounded by white, red and black ring.<sup>4</sup> Notice the irregular arrangement of the spots.

2 *a*. Blue ground : the end of wavy lines, white, red and possibly black.

3 *a*. Width 1.07 m. Light-red ground : scale pattern, white, dark-red and black.

4 *a*. Width 1.1 m. Blue ground : herring-bone pattern (colour lost) as in Vestibule.<sup>5</sup>

5 *a*. Width 1 m. Yellow ground : spots as in 1 *a*.

6 *a*. Width 1.04 m. Blue ground : wavy lines, red and white.<sup>6</sup>

7 *a*. Width 1.11 m. Light-red ground : arcs of circles with central diamond in red.

<sup>1</sup> Rodenwaldt, *Tiryns*, ii. p. 234, Fig. 83.

<sup>2</sup> Rodenwaldt, *op. cit.*, p. 23, Figs. 2, 3.

<sup>3</sup> *Jahrbuch*, 1919, p. 102.

<sup>4</sup> For detail of the various patterns see *Jahrbuch*, 1919, p. 97 ff.

<sup>5</sup> See below, p. 238. The ground is mostly so burnt that the colour can only be distinguished in small patches.

<sup>6</sup> Probably in all cases the lines were black, white and red, the red being most often preserved.

- 8 *a.* Width 1.17 m. Ground discoloured : circles.  
 9 *a.* Width 1.23 m. Ground discoloured : slight traces of lines.  
 10 *a.* Width 1.21 m. Ground discoloured : pattern lost.  
 11 *a.* Width .44 m. Light-red ground : scale pattern, in dark-red.

*Second Row :*

- 1 *b.* Blue ground : traces of curved lines.  
 2 *b.* Light-red ground : herring-bone pattern, as in Vestibule.<sup>1</sup>  
 3 *b.* Width 1.07 m. Ground discoloured : spots.  
 4 *b.* Width 1.1 m. Wavy lines, red and white.  
 5 *b.* Width 1 m. Ground discoloured : no pattern shewing.  
 6 *b.* Width 1.04 m. Ground discoloured : in one place slight traces of red and white, suggesting a spot, which would be improbable owing to the spots on 5 *a.*

The other squares in the second row, and the few remains of the third row, are completely discoloured.

EARLIER NORTH WALL.

Immediately behind the rubble core of the north wall we found another wall face (Pl. XXXIV. *c, d*) beneath the floor of the South Corridor (35, 37). This is a rubble wall faced with clay plaster well mixed with chaff. It rests on the rock (Fig. 38), which here rises rapidly northwards. Its base is therefore .45--50 m. above the level of the floor of the Court. This wall (see plan, Pl. II.) is in the same line as the south wall<sup>2</sup> of the Antechamber to the Domestic Quarters (33), which is not parallel with the north wall of the Megaron. Thus since it runs behind the north walls of the Court and of the Megaron, and was once obviously meant to be seen (for it is faced with plaster), it should be older than the Megaron and the Court. Further, the base of the wall lying .45 m. higher than the floor of the Court shews that the level immediately to the south of this wall (the space now occupied by the Court) was originally higher.<sup>3</sup>

The traces of burning shew that there are two periods in the floor of the Court and of its north wall. The first of these periods we suggest may be contemporary with the construction of the Pillar Basement and the whole of the complex of apartments comprising the Court, Megaron, Room of the Throne and adjoining parts. The second period, due to repairs

<sup>1</sup> See p. 238.

<sup>2</sup> This lies immediately to the north of the Megaron and its Vestibule (56, 57).

<sup>3</sup> The rock has been cut away to make the present level of the Court, as also to support the staircase (34) from the Porch (55) (see below, p. 257, and the Section, Fig. 38).



after a fire which destroyed part of the Palace, might be contemporary with the filling in of the Pillar Basement.

Following this argument, then, the wall behind the north wall of the Court must belong to some previous phase of the Palace before the Court and Megaron were laid out. As the Pillar Basement which belongs to that scheme of laying out dates from the beginning of the L.H. III. period, then the wall behind the north wall of the Court should be older, either L.H. I. or II. It may then be considered as belonging to a first or at least an earlier Palace of which other possible remains are to be recognised elsewhere. The lay-out of the Court and the Megaron would have taken place at the beginning of L.H. III. at the same time as the acropolis wall, the Grave Circle, Lion Gate and other great erections. It is very tempting to assume that in that great time of building activity the Palace was rebuilt and enlarged. Then the old high level to the south of this wall was cut down and by means of fill the terrace was extended further south to make a larger Court. It was naturally advisable to cut down the level. It meant that the made ground to the south had to be built up less high and also provided earth and rubbish which could be used as fill.

We must now consider whether the evidence obtained from below the floor of the Court supports these tempting theories.

In the centre of the Court, in a place where the cement floor was damaged, we dug a pit (54) right down to the native rock below with these results :

The first layer below the floor of the Court from 71·94 to 71·64 gave :

Early Helladic, three sherds.

Middle Helladic, Minyan ware, grey, one sherd.

Matt-painted, Groups B. I. and II., five sherds.

Plain and polished, ten sherds.

Late Helladic, four painted sherds; nearer dating is not possible, but they appear rather to be L.H. I. or II.

Yellow Minyan, six sherds.

Handleless cups, thirteen fragments.

Handle of a skillet or dipper of plain red ware; and two indeterminate pieces.

The general character of this layer is that it is earlier than L.H. III., probably L.H. I.-II.

The second layer from 71·64 to 71·34 gave :

Early Helladic, four sherds.



Middle Helladic, Minyan ware, grey, nine pieces.

Matt-painted, Group B. I., eighteen sherds.

Group B. II., six sherds.

Plain and polished ware, thirty-four pieces.

Late Helladic, indeterminate painted, one sherd.

Handleless cups (L.H. I. or II.), six pieces.

Miscellaneous coarse ware, four sherds.

The general character of this layer is early L.H. I. or late M.H.

The third layer from 71·34 to 70·92 gave :

Early Helladic, two sherds.

Middle Helladic, Minyan ware, grey, two sherds.

Matt-painted, Group B. I., eight sherds.

Group B. II., seven sherds.

Plain and polished ware, seventeen sherds.

Coarse domestic ware, two sherds.

Late Helladic I., one sherd.

The fourth layer from 70·92 to 70·54, gave :

Early Helladic, one sherd.

Middle Helladic, Minyan ware, grey and Argive, ten sherds.

Matt-painted, Group B. I., thirteen sherds.

Group B. II., five sherds.

Plain, polished and domestic ware, fifteen.

This layer is in character late M.H. It runs from the top of the wall visible in the side of the pit to a floor (level 70·62-70·54) of yellowish-white clay which seems to be in connection with it. We followed up the line of the wall above the floor level both east and west for a short distance, and found the following pottery :

Early Helladic, five sherds.

Middle Helladic, Minyan ware, grey, seventeen sherds.

Matt-painted, Group B. I., twenty-eight pieces.

Group B. II., two sherds.

Group D. I., light-on-dark, one.

Plain polished and domestic ware, seventeen.

The fifth layer from 70·54 to 70·19, which is the average level of the rock gave :

Middle Helladic, Minyan ware, grey and Argive, sixteen.

Matt-painted, Group B. I., fifteen sherds.

Group B. II., five sherds.

Group D. I., light-on-dark, two sherds.

Plain, polished and domestic ware, twenty-two.

This layer from its general character and the quantity of Minyan ware seems to belong to the early Middle Helladic age.

Finally, in clearing the irregular surface of the rock, which is full of holes at this point (the deepest hole goes down to 69·86), we found more pottery, as follows :

- Early Helladic, ten sherds, most with red paint.
- Middle Helladic, grey Minyan ware, one sherd.
- Matt-painted, Group B. I., two sherds.
- Polished and plain, nine sherds.
- Coarse domestic ware, nine sherds.

We also made tests on the north and south sides of the drain (58) about the middle of its course. Here we found a layer of earth containing débris, potsherds, oyster-shells and animal bones, similar to that under the floor of the East Lobby of the Grand Staircase. Both the test to the north of the drain and that to the south found at a depth of one metre a fill of rough limestone blocks. This is what we should expect, since the southern half of the Court is built on an artificial terrace

In the earth over the fill we found on the north side this pottery :

- Middle Helladic, Minyan ware, grey, two sherds.
- Matt-painted, Group B. I., two sherds.
- Late Helladic I., one sherd.
- Handleless cups, four pieces.
- Plain ware, either M.H. or L.H. I., thirteen pieces.

On the south side of the drain we found this pottery :

- Early Helladic, four sherds.
- Middle Helladic, Minyan ware, grey, five sherds.
- Matt-painted, Group B. I., twelve sherds.
- Group B. II., two sherds.
- Group B. III., three sherds.
- Plain, polished and coarse ware, forty-two sherds.
- Late Helladic I., ten sherds.
- Handleless cups, ten fragments.
- Indeterminate but not L.H. III., eight pieces.

On the south side of the drain towards the south-west angle of the Court we made another test. From below the cement pavement to a depth of 70·18 we found this pottery :

- Middle Helladic, Matt-painted, Group B. I., six sherds.
- Polished and plain ware, thirteen sherds.
- Late Helladic I., six pieces.
- Handleless cups, four fragments.

At this level we found the top of a wall running east and west, and built

of small stones; we dug down on the south side of it for over a metre and found this pottery:

Middle Helladic, Minyan ware, two sherds.

Matt-painted, Group B. I., seven sherds.

Group B. II., ten sherds.

Polished and plain ware, nine sherds.

Late Helladic I., three sherds.

Owing to the narrow space and the fear of disturbing the drain and the foundations of the south wall we could not go deeper than 69·15, but had not reached rock at this depth. This wall seems thus from the evidence of the pottery found by it to be of L.H. I. date.

In clearing the line of big limestone blocks (59) which we have suggested above formed the foundations of the south wall of the Court we found much pottery ranging from Early Helladic down to L.H. III., and there were even a few Hellenic sherds here, including a loom weight of the usual pyramidal type inscribed  $\phi\iota\lambda\iota\sigma\tau\upsilon\sigma$ . Thus although L.H. I. and II. ware was found among these foundations it would be better not to base any argument on their presence, as this part has been heavily denuded and much disturbed.

The south end of the west wall of the Court has disappeared except for its foundations. The central piece between the red sandstone threshold (level 71·88) and the conglomerate threshold in the north-west angle where begins the corridor (49) which leads to the Western Portal (45) still has one row of ashlar blocks of poros *in situ* on a rubble foundation (Pl. XXXIV. a). Only the side of the wall towards the Court is faced with poros; the other side towards the Room of the Throne is built of rubble. These ashlar blocks all have dowel-holes on their upper surfaces, obviously to fasten horizontal wooden beams as in the case of the north wall. These blocks, however, are slightly lower than those of the north wall, being 40–45 m. high as against 45–50 m. Above the horizontal wooden beam which lay on these blocks, there was in all probability ashlar work in poros just like that in the north wall. In fact, Tsountas found two rows of poros blocks lying on the floor of the Court in front of this wall having all the appearance of an ashlar wall fallen on its face.<sup>1</sup> This west wall was possibly, as suggested in the sketch reconstruction (Fig. 37), pierced with a window to light the Room of the Throne, and with other windows above to light the chambers on the upper storey. Between the conglomerate threshold and

<sup>1</sup> *Πρακτικά*, 1886, p. 65.

the north wall there was another short piece of ashlar work of which the lowest course only is preserved. The red sandstone threshold <sup>1</sup> has a pivot-hole for a door, but the conglomerate threshold seems to have had no door.

Lying along the north side of the Court under the wall Tsountas found three column bases of conglomerate which he believed to have fallen from the upper storey. This is very likely. They may have belonged to a gallery in or above the South Corridor <sup>2</sup> (35, 37), or possibly to a loggia above the porch of the Megaron as suggested in Fig. 38. We could find only one of these bases. It measures .57 m. in diameter, and is .30 high. So it could not have supported either a very tall or a very thick column.

Above the floor of the Court we found nothing but L.H. III. pottery, including characteristic shapes such as deep bowls and jugs of a hydria type. When Tsountas excavated here he found in the Court a complex of late walls very roughly built of limestone and poros. Among them he found Geometric pottery, which unfortunately cannot now be identified, but Tsountas' report <sup>3</sup> shows clearly that these walls are posterior to the destruction of the Palace. When we re-examined the Palace, with the permission of the Greek Archaeological authorities we removed the Geometric walls after they had been carefully planned, since they were of no value and impeded the study of the Mycenaean Palace. In removing them we found no Geometric sherds, nothing but the L.H. III. pottery already mentioned.

#### THE DRAINS.

Another test was sunk directly to the east of the red sandstone threshold which leads into the Court from the Room of the Throne. At level 71.00 below the cement floor we found a slab-built drain about .30 m. wide and high running from north to south. We could not find any junction between this drain and that which runs under the Room of the Throne, and we equally failed to find an outlet for it to the south. It certainly does not run into the Main Drain (58) of the Court, because at the west end the level of its floor is 70.84, or some .10 m. higher than the floor of

<sup>1</sup> This was possibly walled up in the latest phase, see above, p. 180.

<sup>2</sup> Cf. the gallery windows in the frescoes, Pls. XLII., XLIII., and Rodenwaldt, *Fries des Megarons*, Pl. 1.

<sup>3</sup> *Πρακτικά*, 1886, p. 60, Pl. 4.

this north-south drain. Perhaps this lower drain belongs to some earlier system later discarded. In digging down to this drain we found this pottery :

Middle Helladic, Matt-painted, Group B. I., six sherds.

Minyan ware, three sherds.

Polished and plain ware, eighteen sherds.

Late Helladic I., about twenty sherds.

Late Helladic II., one sherd.

Handleless cups, seventeen pieces.

Late Helladic III., four sherds.

Further investigation of this drain was unfortunately impossible without great damage to the cement pavement.

The Main Drain, which runs from the west wall against the Pillar Basement obliquely along the south side of the Court and out through the rough limestone fill immediately to the south of the south anta of the Porch (55) of the Megaron, has one noticeable peculiarity. It is about .70 m. wide and increases in depth eastwards from .75 to 1.30, and finally to 1.50 m. Where it runs through the Court its sides and floor are built of well-dressed rectangular blocks of poros and roofed with flat limestone slabs. Just by the south anta of the porch the walls are built of rough, well-packed undressed limestone blocks, and the drain narrows to about .40 m. It is floored throughout with limestone slabs. Below these slabs at the east end we found seven sherds of M.H. ware, three of L.H. I., and three of L.H. III. ware, which seems to prove that the drain at least is not earlier than L.H. III., and consequently that the cement floor, which crossed it, belongs to the same period. The rectangular blocks of poros just referred to have in one or two cases dowel-holes on their upper surfaces. These dowel-holes are exactly like those cut in the ashlar work of the north and west walls of the Court or of the west wall of the Grand Staircase to hold horizontal wooden beams. As these blocks were covered by the ends of the limestone slabs that roofed the drain, the dowel-holes have here no meaning. No one would want to use wooden beams in the construction of a drain. These blocks seem then to have come from some earlier ashlar construction which was destroyed, and were re-used to build the Main Drain. As the extreme west end of this drain rests on the fill of the Pillar Basement, the drain should be approximately contemporary with the filling in of the Basement. We have already suggested that the Pillar Basement was damaged in a fire which also ruined the north wall

of the Court. It is possible then that the poros blocks of the drain were originally part of the ashlar work of the north wall before it was rebuilt.

#### DATE OF COURT.

The drain runs through a layer of earth which rests on a fill of limestone blocks. In this earth L.H. I. pottery is found. Further north under the floor of the Court where there is a natural deposit resting on rock little or no L.H. I. ware was found, but quantities of Middle Helladic pottery. Below the floor of the drain at its east end L.H. III. pottery occurred. It thus seems that the Court was laid out and the cement floor put down after L.H. I. The presence of so many handleless cups in the earth on either side of the drain suggests that the Court was made not earlier than the end of L.H. II., since such cups are commonest in L.H. II. We can then imagine that when the earlier and higher level which lay at the foot of the earlier north wall was cut away to make a lower and wider level, and the area of the Court was extended to the south by a terrace of limestone fill, the earth then dug away from the north side was thrown down on the south to obtain an even surface over the fill and a good backing for the cement floor (cf. Fig. 38).

We thus get three clear stages. The first stage is represented by the earlier wall behind the north wall of the Court, and the L.H. I. wall in the south-west corner below the cement floor (level 70·18), and these must be part of an earlier building, perhaps a palace. We can thus speak henceforward of a First Palace and a Second Palace.

#### *The First Palace.*

The First Palace would probably have been of L.H. I. date, because behind the earlier north wall M.H. pottery is found, and below the floor of the Court we have the L.H. I. wall and M.H. walls and floors, which have no connection with the earlier wall behind the north wall. The M.H. and E.H. pottery below the floor of the Court show that the site was inhabited long before the building of the First Palace. This, since it falls between the Middle Helladic and Late Helladic III. periods should date from L.H. I., and was probably the home of the princes who were buried in the Shaft Graves.

#### *The Second Palace.*

The Second Palace seems to have had two phases at least. The first phase is represented by the Pillar Basement and the damaged north

wall of the Court; the second by the filling in of the Pillar Basement, the building of the Grand Staircase in its existing form and the reconstruction of the Court. These two phases both belong to L.H. III. The covering of the floor of the Court and the north wall with painted stucco could not have been done long before the final destruction of the Palace. When the slight alterations such as the bench in the West Lobby to the Grand Staircase were made we cannot tell, except that they took place in L.H. III. They with the stucco floor might represent yet a third phase of the Second Palace.

#### 7. THE WEST CORRIDOR AND STAIRCASE.

Leaving the Court over the conglomerate threshold in the north-west angle we enter a narrow corridor (49) floored with cement. This corridor is 1.50 m. wide and runs westwards for more than 8 m., and then turns at right angles to the north (or right) into the west end of the South Corridor (40). Directly on the right (or north) after crossing the threshold from the Court we pass a small staircase (48). Of this two steps (.15 m. high and .40 m. deep) still exist in good condition. They, like those of the Grand Staircase, are composed of several pieces of soft grey sandstone fitted together, and are covered with at least three coatings of white stucco. They lead on to a small landing about 1.0 m. by 1.10 m., also floored with white stucco. On the landing the staircase turned at right angles westwards and led up to the apartments over the Room of the Throne. This upper part of the staircase was obviously supported on wooden beams, and collapsed when they were burnt. In fact, one can still see in the top of the wall of the corridor the remains of two or three treads of badly broken pieces of soft grey sandstone. These may have formed part of some of the treads of this staircase, and when it collapsed fell sideways on to the wall.

By the side of the lowest step of this staircase, at the east end of the north wall of the corridor, is a large square block of poros with four dowel-holes in it for fastening upright wooden beams which formed the angles of a rubble pier. A similar poros block with three dowel-holes which served a similar purpose is set at the west end of the same wall. Rubble piers such as these strengthened with wooden beams at their angles helped to carry the superstructure and to give firmness to the wall.<sup>1</sup>

<sup>1</sup> Cf. Schliemann, *Tiryns*, pp. 212, 234.

How far this West Corridor ran westwards beyond the turn to the north we do not know. The whole area west of the Room of the Throne (46 and 51) now shows no remains of walls at all; it is a mass of fill held up by the south end of the West Terrace Wall immediately to the east of the Pithos Area (50). The heavy denudation which has taken place here renders vain all hope of recovering details of the Palace plan in this region.

#### THE CLOSET UNDER THE STAIRS.

Just where the West Corridor turns northwards it passes the opening to a small closet under the stairs leading to the upper storey (47). The entrance to it lies between the poros block at this corner and a similar block which lies at the west end of the wall separating this closet from the South Corridor (37). This other poros block also has dowel-holes for the wooden supports of a rubble pier to carry the beams spanning these openings and corridors. The floor of the closet has disappeared. It lay above a heavy mass of rough limestone fill which ran down to the native rock, on which lay a thin stratum of black earth containing M.H. sherds. In the limestone fill we found the fragment of the bull's head rhyton of steatite published in Section IV,<sup>1</sup> and the following pottery :—

Early Helladic, six sherds.

Middle Helladic, Minyan ware, grey, five sherds.

Matt-painted, Group B. I., eleven sherds.

Group B. II. four sherds.

Plain and polished, nine sherds.

Late Helladic I., one sherd.

Late Helladic II., two sherds (one of a handleless cup).

Late Helladic III., kylikes, two painted and nine plain fragments.

Deep bowls, four pieces.

Jugs of a hydria type, three pieces.

Other painted sherds, five.

Terracotta figurines of animals, two.

There was in addition a quantity of plain and coarse domestic ware which cannot be classified more closely; and a small button-shaped steatite whorl.

Of this pottery the Early Helladic and Middle Helladic was principally found in the soft black earth right on the rock, while the rest was scattered in the limestone fill. The general impression is that it is not later in

<sup>1</sup> *B.S.A.*, xxiv. pp. 203-4, Pl. XIII. 3, *d*, *e*.



date than the deposit below the floor of the Pillar Basement. Though from the circumstances we cannot make too much of this evidence, yet it is of some little value in conjunction with that afforded by the adjoining parts of the Palace, with which it agrees. The cumulative value is thus all the greater, especially as regards the date of the Second Palace, to which this closet belongs.

#### 8. THE SOUTH CORRIDOR.

Going from the Court along the West Corridor and turning northward at right angles past the closet (47) under the Staircase, we reach the west end (40) of the South Corridor (40, 37, 35) just inside the West Portal (45). This corridor seems originally to have run straight through from the Western Portal to the Antechamber of the Domestic Quarters (33) lying to the north of the Megaron, as suggested by Tsountas.<sup>1</sup> Later this plan was altered, and the South Corridor cut short immediately to the north of the Porch to the Megaron (55) by the figure 35 on the plan. From the Western Portal it is entered over a gigantic threshold of conglomerate,<sup>2</sup> which has at its south end a pivot-hole for a door as well as a sawn ledge for the door to rest against (Pl. XXXVI. c). Thence the Corridor, which is floored throughout with cement, rises steadily as it runs eastwards. Unfortunately, the eastern part has been almost completely destroyed by Schliemann's trial pit, which was driven right down to the rock here in the area indicated by the figure 36. We thus do not know the height reached by the Corridor. Its floor just within the Western Portal is at a level of 71.35, somewhat further east it is at 72.25, and at the highest point preserved to the east it is at 74.21. This last point is directly behind the ashlar work in the east part of the north wall of the court, and is only about .70 m. below the level of the horizontal wooden beam for the window-sill in the north wall of the Court. As in this distance of 10 m. we know the corridor rises 2 m., we can assume that for the remaining 10 m. as far as the figure 35 it would have risen at least another metre-and-a-half.

This would have been quite enough to bring the level up to that of the end of a conglomerate threshold block which projects from the wall at the east end of the South Corridor by the figure 35. Behind this to

<sup>1</sup> *Практика*, 1886, p. 70.

<sup>2</sup> It is 3.17 m. long, 1.10 m. wide and .30 m. thick.

the north in an angle a very small piece of the floor and clay-plastered walls of a room is to be seen. The level of this floor is 75.55 and it is below the level of the North Corridor (17-20) and of the cement floor (76.15) which lies just to its east. Therefore it seems that the room now represented by this small piece of floor was entered from the South Corridor by a door no longer preserved, but which lay in all probability directly behind the suggested east window in the north wall of the Court. This room (36) cannot have been much more than a storeroom because it was in the substructures of the upper storey, but we have no clue to its exact size or purpose. The conglomerate threshold lies at a height of 75.50 and thus its level agrees with that of the floor. We can assume then that the threshold when complete was that of some entrance to the east to which the South Corridor gave access. The threshold had a sawn ledge for a door on its west side, but the piece still remaining in the wall has been sawn off the main part, or rather the latter was sawn three-parts of the way through and then broken off by its own weight. Probably the South Corridor, in its first stage, ran direct from the Western Portal to the Domestic Quarters north of the Megaron, and this threshold was that of a doorway by which the private apartments were approached.

From the Corridor one would have entered not only the Antechambers to the Domestic Quarters at a point above the west end of Lobby 33, but perhaps also, as suggested in the restored view shewn in Fig. 38, the conjectured loggia above the porch of the Megaron. Then something must have occurred which caused an alteration of plan, perhaps the fire which damaged the north wall of the Court.<sup>1</sup> In any case the South Corridor was cut short by the figure 35. The conglomerate threshold could not be removed bodily as its north end was embedded in a wall which supported the upper storey. Consequently, the threshold was sawn through, the main part removed and the north end left *in situ* in the wall where it still is (Pl. XXXIV. d). In place of the threshold a wall was built across to retain the east end of the Corridor. Then to provide access to the Domestic Quarters a door was made from the north end of the Porch (55) of the Megaron, and the staircase (34) and the Antechamber (33) were dug out to a lower level.<sup>2</sup> This arrangement was an

<sup>1</sup> See p. 192, above.

<sup>2</sup> The Antechamber (33) may have already been in existence and this reconstruction may simply have altered the means of approach to it.

improvement, for it gave direct communication between the Megaron and the Domestic Quarters to the north, while it was easy to reach the Western Portal by the Court and the West Corridor. The South Corridor, however, ceased to have any purpose except to give access to the basement rooms which lay on its north side.<sup>1</sup>

When the South Corridor was first built the level up which it runs seems to have been lowered, for below its floor (by the figure 37) and under its north wall the only pottery found was Middle Helladic, including Grey Minyan ware. Similarly, just to the north of the South Corridor by the figure 38, a small piece of wall about .60 m. high and .60 m. wide is to be seen below the west line of the foundation of the Doric Temple. All the pottery found by it, except for one kylix stem, was M.H., and included some Minyan and a fine piece of Matt-painted, Group B. I. So this wall is probably of Middle Helladic date, and it appears that when the Second Palace was built, the level was cut down on the slopes here so that the floors of the Palace now lie for the most part directly above the Middle Helladic stratum.

#### 9. THE WESTERN PORTAL.

Outside the big conglomerate threshold which lies at the west end of the South Corridor was a small entrance porch now known as the Western Portal (45), since in connection with a Propylon and roadway (7, 9, 10, 44) it provided an entrance to the central parts of the Palace from a higher level than the Grand Staircase. This porch, which was probably roofed, was faced at either side with ashlar work in poros, of which a few blocks of the lowest course are still *in situ*. Another block was found by us lying directly outside the threshold, and there are other similar blocks built into a late Greek wall just to the west of the figure 45. The depth of the porch we do not know, but it probably extended at least as far west as the south-west angle of the room immediately to the north of the Portal (41). Just at the angle on the outside are two big limestone blocks (level 69-83). They seem to be still *in situ*, and to have once helped to support the roadway, which, as it ran southwards from the north-west Propylon, here turned at right angles eastwards to enter the Western Portal. It is just to the south of the Western Portal that the West Terrace Wall turns in eastwards,<sup>2</sup> as though its

<sup>1</sup> Compare, however, Dr. Holland's opinion, p. 281, below.

<sup>2</sup> See above, p. 161.

main purpose was to carry the inclined roadway leading up to the Western Portal.<sup>1</sup> It is unfortunately impossible now to obtain more details since not only has the area been badly denuded, but also considerably disturbed by later Greek, especially Hellenistic, building. Between the Western Portal and the West Terrace wall there is a heavy mass of fill of rough limestone blocks thrown in on the sloping rock. We drove a test pit down to the rock here with the following results.

The first layer from the surface to a depth of .75 m. gave :—

Middle Helladic, Minyan ware, grey, eleven sherds.

Matt-painted, Group B. I., six sherds.

Group B. II., four sherds.

Plain and polished, thirteen sherds.

Late Helladic (no closer definition possible), six do., including part of pithos.

Hellenistic, four fragments.

The second layer from .75 to 1.40 m. gave :—

Early Helladic, two sherds.

Middle Helladic, Minyan ware, grey, four sherds.

Matt-painted, Group B. I., two sherds.

Plain and polished, two sherds.

Hellenistic, part of a late terracotta figurine.

The third layer from 1.40 to 2.00 m. gave :—

Early Helladic, twelve pieces.

Middle Helladic, Matt-painted, Group B. I., two sherds.

Polished and plain, five sherds, and eight pieces of coarse ware.

The fourth layer from 2.00 to the rock at about 2.20 m. gave :—

Early Helladic, fourteen sherds.

Middle Helladic, Minyan, grey, one sherd.

Matt-painted, Group B. I., six sherds.

Plain and polished, two sherds.

Coarse ware, two sherds.

Once again we see that almost immediately below the floors of the Second Palace M. H. pottery is found, thus confirming the suggestion that when the Second Palace was constructed, large schemes of terracing took place.

<sup>1</sup> The lack of parallelism between the West Terrace Wall and the section of the Palace comprising the Western Portal and the Room of the Throne (and therefore the Court and Megaron) is noted below by Dr. Holland, pp. 273 ff.; but it does not necessarily follow that the Terrace Wall is later than this group of buildings, for the mere existence of the Western Portal and of the roadway leading up to it from the Propylon presupposes a terrace wall.

*The Copper Ingot.*

To the west of the Western Portal and above the West Terrace Wall Tsountas found the well-known ingot of copper which has been published by Svoronos,<sup>1</sup> and is similar to those found at Hagia Triada and near Kyme and elsewhere.<sup>2</sup> Copper ingots of this type are carried by Keftiu and other folk in paintings in Egyptian tombs of the XVIIIth Dynasty.<sup>3</sup> This Mycenaean ingot was found just below the surface of the ground, and may be regarded as part of the metal treasures of the Palace dropped by plunderers. One side of the ingot is rough and bears a sign impressed in it. The other side is smooth, with raised edges. Like all the ingots of this class, it is oblong and has curved projections at each angle. Its shape was originally thought to be that of the double-axe, but recently Mr. C. T. Seltman has pointed out that it is far more that of an ox-hide.<sup>4</sup> In the same neighbourhood Tsountas found some interesting fragments of unburnt fresco, representing a frieze of grooms and horses, which have been already described and discussed in connection with the Pithos Area.<sup>5</sup>

## 10. THE NORTH-WEST PROPYLON AND GUARDROOM.

Leaving the Western Portal we turn immediately at right angles to the north, descending what was originally no doubt an inclined roadway floored with cement. The Western Portal itself was doubtless roofed, but the roadway which ran (44, 10) above the West Terrace wall was probably open to the sky like the somewhat similar roadway at Tiryns leading from the great gate of conglomerate to the outer propylaea. That this roadway was inclined is proved by the survival of a small fragment of its cement floor just at the north-west angle outside the room (41) north of the Western Portal. This cement floor has a level of 70.68, whereas the threshold of the Western Portal has a level of 71.29, indicating a fall of over .50 m. between the two points.

From here onwards to the north-west angle of the Palace the roadway has been very badly damaged by Hellenistic constructions; for instance, just beyond the piece of cement floor there is a Hellenistic olive press (10) cut out in the foundations of the Palace. There is here one large

<sup>1</sup> *Journ. Int. Arch. Num.*, 1906, Pl. V.; Seltman, *Athens, its History and Coinage*, pp. 4, 5, Figs. 3, 4.

<sup>2</sup> Svoronos, *op. cit.*, Pls. II. and III.; Seltman, *op. cit.*, pp. 1 ff.

<sup>3</sup> Svoronos, *op. cit.*, pp. 173 ff.; Seltman, *op. cit.*, p. 2, Fig. 1.

<sup>4</sup> Seltman, *op. cit.*, pp. 4 ff.; 112 ff.

<sup>5</sup> So Prof. Tsountas kindly informs us. See pp. 164 ff., above, and Pls. XXVI. b, XXVII.

limestone block (just by the figure 10) *in situ* which might have carried a column or an anta. Further northwards still lie two large column bases of conglomerate <sup>1</sup> no longer *in situ*, but they are so large (1.10 m. in diameter and .40 m. thick) that presumably they cannot have been moved very far (Pl. XXXVI. b). Their workmanship is similar and so probably contemporary with that of the conglomerate used in the Megaron. By the side of them lies a broken block of conglomerate (measuring .80 by .60 m.) which carried a column .40 m. in diameter. This may have been moved some distance, but the other two bases may easily have been connected with a propylon which we shall see once probably stood here. If we may judge by Knossian analogies the columns that stood on these bases would have been about 3.50 m. to 4 m. high.<sup>2</sup> The column bases of the outer propylaea at Tiryns measure about .65 m. in diameter, so these two bases could well have carried columns of sufficient height for a propylon. Just by them the West Terrace Wall turns west for 2 m., and then runs north again for about .8 m., when it comes to an end. This turn westwards has the effect of widening the terrace supported by the wall. In other words the terrace widens out just before it comes to an end, or rather just where it begins. That is to say, at the very point where we should have expected a propylon we find not only two large column bases but a widening of the terrace by 2 m. (9).

At the north end, or rather at the beginning of the West Terrace Wall, we find 7.50 m. to the east, on the other side of a rectangular area (9), another terrace wall which runs northwards and then turns round the corner along the north side of the acropolis. Midway between these two walls a conglomerate block, roughly rectangular, which lies at a level of 68.87, indicating a descent of 2.50 m. from the Western Portal, stands *in situ* in a foundation of rough limestone blocks. By the side of this lay a much-damaged conglomerate column base about 1.10 m. in diameter and .15 m. thick, which may once have stood on the rectangular block.<sup>3</sup>

<sup>1</sup> These are quite unlike those of the early high type at Knossos, which are .58 m. in diameter and .34 m. high; see Evans, *Palace of Minos*, i. p. 212, Figs. 156, 157.

<sup>2</sup> On the staircase at Knossos the column bases are .47 m. in diameter, and the columns 2 m. high. In the Hall of Colonnades the column bases are .60 m. in diameter, and the columns 3 m. high. In the Queen's Megaron the column bases are .63 m. in diameter, and the columns about 3.07 m. high. In the Royal Villa the bases are .47 m. in diameter, and the columns could not have been more than about 2.70 m. high.

<sup>3</sup> The column bases of the Megaron and of its Porch rest on rectangular blocks of conglomerate.

A propylon or porch with one column would not be at all surprising, for we find an exactly similar arrangement in the West Entrance at Knossos; <sup>1</sup> the late L.H. III. houses at Korakou <sup>2</sup> have a porch with one column *in antis*, and a similar arrangement existed in the reoccupation of the Megaron <sup>3</sup> at Tiryns late in L.H. III. We might then suggest that there was here a propylon with one column to the north, the outside, and two columns to the south, the inside. This would be an unusual arrangement, but although this and other details must remain undecided it seems quite likely that there was a propylon at this point; and this becomes yet more probable when we look outside it to the north.

Immediately to the north of the outer rectangular column base *in situ* lies a rectangular area (7) paved with cobble-stones which extend almost to the corner where the eastern terrace wall turns eastwards along the north side of the rock.<sup>4</sup> In the western part of this area is a line of limestone slabs, certainly the roof of a drain, as is proved by the difference in level between the most northern and most southern slabs. To the north-west below this paved cobbled area lies a sloping terrace (8) supported by a wall of good Cyclopean work. This terrace slopes up from south to north, and may be taken as the end of a roadway which after zigzagging up the hillside from the Great Ramp ended here at the north-west angle of the Palace before a small cobbled court across which one approached the Propylon. This would have provided a way for pack or perhaps even wheeled traffic right up to the higher level at which most of the Palace stood. The other entrance up the Grand Staircase involved a steep climb up the stairs before any part of the Palace could be reached. This north-western entrance gives immediate admission to the principal level of the Palace by an easy gradient.

Before we leave this propylon there is one other point to observe. The West Terrace Wall from the Pithos Area to the set-back by the two large conglomerate column bases is built in one homogeneous style. The blocks of limestone are packed together in a careful Cyclopean manner with well-built angles. Some attempt was made to course them and generally speaking the masonry is good. The north end of this West

<sup>1</sup> Evans, *Palace of Minos*, i. p. 214, Fig. 158.

<sup>2</sup> Blegen, *Korakou*, pp. 80 ff.

<sup>3</sup> Blegen, *op. cit.*, pp. 130 ff.

<sup>4</sup> Among the cobbles some pieces of cement flooring were found, but there is nothing to shew where it originally lay.

Terrace Wall, where by its widening it would have supported the Propylon, is much less careful and rougher in construction. The blocks show no signs of dressing, and are not well laid. The same is also generally true, as regards construction, of the further piece of terrace wall beyond the Propylon to the north-east by the Guard-room (3),<sup>1</sup> where, however, the blocks are somewhat more carefully laid. We thus see that there is a difference in appearance and style of building between the north-west angle and the rest of the West Terrace Wall, which may perhaps indicate a difference in date. If the main part of the West Terrace Wall goes with the Western Portal, it is of L.H. III. date, because L.H. III. pottery was found beneath the floor of the Room (41) to the North of the Portal.<sup>2</sup> The actual terrace wall of the Propylon and of the north-west angle looks older.

Perhaps the earliest entrance to the Palace lay here and the Grand Staircase was an afterthought to provide more direct access to the Room of the Throne, the Court and Megaron without disturbing the main part of the Palace. If the earliest entrance to the L.H. III. or Second Palace lay here, it may well have been a remodelling of a yet earlier entrance belonging to the First Palace. The difference in style between the Propylon Terrace Wall and the main West Terrace Wall indicates an earlier date for the Propylon walls, while the conglomerate column bases suggest a date as late as or later than the Megaron. These two points together indicate a remodelling. If the West Terrace Wall belongs to the L.H. III. or Second Palace, we might assign the earliest form of entrance here to the First Palace which centred round the summit of the citadel, for after all the easiest and most natural ascent of the acropolis from the north, south or west is by way of this north-west angle.

In clearing the ruins of the Propylon we found a piece of decorative stone-work carved with a version of the favourite Mycenaean rosette and triglyph pattern (Fig. 47, *a*). This will be described in connection with the decoration of the Porch below (p. 237).

#### THE GUARDROOM.

As already stated, the other terrace wall to the east of the cobbled area (7) runs northwards for some 5 m., and then turns at right angles eastwards for 6 m. Next it turns north again for 4.50 m., and then finally

<sup>1</sup> See p. 216, below.

<sup>2</sup> See p. 218, below.



turns east and can be followed for some 9 m. more before it loses itself against the steep rocks of the acropolis. Just before its final turn eastwards and directly to the east of the open space (2) before the cobbled area there is a break in the upper part of the Terrace Wall indicating an entrance to two rooms built between the rock and the terrace wall at this angle (Pl. XXXVI. *d*). These chambers are quite small. The two together form an apartment of the Megaron type. There is a western or outer chamber (3) from which one passes over a conglomerate threshold into an eastern or larger room (4). Both had floors of clay and the walls were coated with the usual clay plaster well mixed with chaff. The floor of the eastern chamber is broken towards the south and south-east by the projection of the native rock. Above the floor of this room at its east end were found the remains of a number of vases still *in situ* which, except for two possible pieces of plain handleless cups, were all of L.H. III. style and date. There was one piece of a kylix with a murex pattern, but all the rest was unpainted pottery. There were about seven kylikes, a large jug of the hydria shape, and fragments of vases of other characteristic shapes of L.H. III. ware. This deposit found *in situ* on the floor was certainly L.H. III. and late rather than early in that period.

Some fresco fragments were found close to the south wall among burnt débris which appeared to have collapsed into the room from a higher terrace behind it to the south. These, as part of the fill of an upper terrace, would probably belong to an earlier date than the first phase of the Second Palace and appear to be contemporary with the deposit below the floor. The fresco is burnt till it has almost the hardness of cement, but its colours have only been slightly affected. The majority of fragments were decorated with parallel stripes, one fragment shewing as many as eight, and keeping to the comparatively sober scheme of red, blue, black, white, and a thin line of yellow. This recalls the borders of many stripes in the passage west of the Queen's Megaron and other rooms in the Palace at Knossos.<sup>1</sup> The fragments included the edge of a step and part of a black and white rosette. The execution is neat and pleasing, and suggests an early date.

Below the floor of this same room, another deposit of pottery and other remains came to light. This comprised :—

<sup>1</sup> Fyfe, *J.R.I.B.A.*, x. pp. 110 ff.; see also Rodenwaldt, *Tiryns*, ii. p. 29, No. 41.

*Pottery.*

Middle Helladic, two sherds, one of which is Minyan.

Late Helladic I.-II., two pieces of a cup of the Vaphio or Keftiu shape.

In addition there were at least twenty-five handleless cups, many of which contained the remains of paint, blue, red, grey, white, black and pink, probably the palette of some long-forgotten fresco painter. There were also eight fragments of fine plain reddish ware with the characteristic L.H. II. rim (see Blegen, *Korakou*, p. 59, Fig. 82).

Late Helladic III., thirteen pieces, mostly from kylikes, part of a small charcoal brazier like those from Tomb 532, and the remains of at least three three-legged cooking vessels.

*Miscellaneous.*

Other finds here included nineteen large loom-weights of terracotta. Fourteen of them were of a flat oval shape and vary in size from  $\cdot 11 \times \cdot 10 \times \cdot 04$  m. to  $\cdot 09 \times \cdot 08 \times \cdot 035$  m. All are pierced at one end for suspension, and at the same end a shallow groove is visible along the edge. The other five are of a rough, flat, rectangular shape, and vary in size from  $\cdot 115 \times \cdot 08 \times \cdot 025$  m. to  $\cdot 105 \times \cdot 06 \times \cdot 025$  m. They taper off slightly towards one end, where there is a hole pierced through for suspension.

*Fresco.*

Among these there were also a quantity of small fragments of fresco.

A large proportion was burnt, hardened, and welded into lumps exactly like that from above the floor. A small proportion shews no trace of burning at all: the two best examples are (i) a fragment with part of a blue spiral, and (ii) a small rosette;  $\cdot 035 \times \cdot 037 \times 013$  m. with red petals outlined in darker red and black lines on a white ground (Pl. XXV. b, 6).

The fresco from below the floor must come either from a late phase of the First Palace or from an early phase of the Second Palace: to judge by the character of the pottery, especially the cups which contained paint, the former suggestion is the more probable. The fresco from above the floor, being part of the same deposit,<sup>1</sup> is also of the same period.

This deposit below the floor certainly provides us with a *terminus post quem* for the construction of these two rooms in their present form. The presence of very little L.H. III. pottery with the handleless cups shews that it cannot fall late in the L.H. III. period. This deposit should then have been laid down very soon after the beginning of L.H. III. The whole of the débris above the floor was so calcined and hardened into a solid mass by the effect of fire that it is possible, since the conflagration

<sup>1</sup> See p. 214, above.

must have raged furiously, that it may have affected the fresco found below the clay floor, which had been baked hard by the fire.

The two rooms in their present form are obviously L.H. III. in date, and we note again the use of conglomerate thresholds at this time. These rooms are built at the angle of the terrace wall and form a kind of basement. They can have had no communication with the rest of the Palace except through the Propylon, since the rock rises immediately to the east and south of them. As they are placed so conveniently to the Propylon and by the side of the cobbled area before it, it is possible that they formed a kind of guardroom, housing the detachment of the royal bodyguard which provided the sentries to guard the Propylon. This north-west angle also provides a fine look-out station for watching the roads northwards to Corinth and Kleonai. Directly to the south of the guardroom in the mass of calcined débris from the Palace, and among the heavy limestone fill thrown in to support the platform on which the later Doric temple was built, there is a short stretch of Mycenaean wall (6); but all around it is so much destroyed that nothing more can be known about it than that it was probably the wall of another room that stood on the terrace at this angle.

With the Propylon and the inclined roadway that ascends from it towards the Western Portal we have now recovered another entrance to the Palace. The stranger would climb a zigzag road from the Great Ramp, and reach its final bend (8, 1) in front of the cobbled courtyard before the Propylon. Here he would find posted at the angle a sentry of the royal bodyguard, while other members of the same corps sat in the sun before the entrance to the guardroom. Passing over the cobbled court he would enter the Propylon on one side of the central column (9), having on his left a mighty terrace wall that supported the upper levels of the Palace. Emerging from the Propylon by a porch which possibly had two lofty columns, he found himself ascending an inclined roadway open to the sky and floored with hard white cement. To his left again was a terrace wall to carry the higher portions of the Palace. Somewhere at this point between the figures 10 and 44 there may have been a side entrance <sup>1</sup> to the east leading up into the North Corridor (17, 18, 19, 20). The edge of the roadway along the top of the West Terrace Wall was

<sup>1</sup> We have not found, however, any sign of such an entrance, and it is perhaps more likely that the North Corridor was reached from the South Corridor by the passage to be described below, p. 221.

probably protected by a stepped parapet like the Great Ramp,<sup>1</sup> which in time of need could serve as a defence. Looking over this to his right the stranger would have a splendid view over the houses on the slope below within the citadel wall, and beyond over the fertile plain towards Argos. Early in the fourteenth century B.C., he could have seen on the further hillside the engineers and masons with crowds of workmen (whether free or slave) busy constructing the Treasury of Atreus. Then the roadway before him turned in sharply at right angles eastwards into a deep porch, the Western Portal, which was the actual entrance to the Palace.

We can now consider the two rooms that lie immediately to the north off the South Corridor (39, 41) and just within the Western Portal itself.

## II. THE ROOM NORTH OF THE WEST PORTAL.

At the very end of the extreme west end of the South Corridor and directly on the left (or north) of anyone entering by the Western Portal lies another large conglomerate threshold with a pivot-hole for a door. Over this access was obtained to a small room roughly square (41). This was floored with cement, which is still preserved in three places, just inside the threshold, in the north-west angle (level 71.21) and in the south-west angle (level 71.31). The threshold lies at level 71.49, and would naturally be somewhat higher than the floor, so the difference in level need excite no remark, especially when one remembers the great differences in level in the cement floor of the court at Tiryns. The north and east walls of the room are quite clear, and the south wall was not difficult to find, but the west wall was far from easy to trace. We believe its line has now been definitely established as shewn on the plan (Pl. II.). In the east part of the room, which had been partially cleared by Tsountas, the floor lay partly on earth and partly on the rock, which rises gradually here. In this part of the room below the level of the floor and on the rock (near the figure 41) we found the following pottery :—

Early Helladic, five sherds, two of which are patterned, one in the light-on-dark, and one in the dark-on-light style.

Middle Helladic, Minyan ware, grey, six sherds.

Matt-painted, Group B. I., four sherds.

Group B. II., two sherds.

Polished and plain ware, nineteen.

Late Helladic I., one sherd.

<sup>1</sup> See above, p. 67.

With this we found two small steatite spindle whorls of the shanked or button type. These are usually of L.H. III. date, at least they do not appear in L.H. I. or II. tombs. But steatite whorls are so common in the later deposits at Mycenae that no importance need be attached to them, especially since this room had already been partially cleared. We have, however, in this deposit another case of M.H. and L.H. I. pottery being found immediately below the floors of the Second Palace. This is one more small piece of evidence which helps to confirm the conclusions derived from a study of the stratification of the Court.

Along the inside of the west wall of the room below the floor level, between it and another wall that is not parallel to it, we found a deposit of soft black earth which was full of broken pottery and other refuse from human occupation. The small space where this was found (42, 43) is bounded by other walls to the north and south, and is even divided by a row of stones into two parts. It is clearly earlier in date than the room and its floor. The walls are probably those of some structure of the First Palace which were abolished during the terracing required for the broader levels of the Second. This may possibly have been the base of a shaft from a latrine in an upper storey.

The pottery can be classified thus :—

Painted Ware, kylikes, one piece with a chevron pattern similar in style to the pottery from Tomb 505.

Deep bowls, several pieces with stylized patterns, including chevrons and octopuses.

Kraters, one specimen painted all over with brown-black glaze paint; a similar vase was found in Tomb 518.

Unpainted ware.

Handleless cups (Fig. 33, *c*), with string marks on the base and often well-defined horizontal ribbing on the sides caused by the pressure of the fingers while revolving on a rapid wheel: very common and like the other specimens of this shape from the staircase, the Pithos Area and the Guardroom. One specimen was found in Tomb 517 (first interments L.H. I.-II.), and another in Tomb 521.

Amphora, one specimen, upper part only.

Shallow bowls (Fig. 33, *b*, *d*) with horizontal ribbon handles, many specimens, which vary in diameter from .14 m. to .23 m.

Large bowl of krater type, one specimen, base missing; diameter .25 m.

Kylikes; these were very common and might be divided into two groups, small kylikes with short stems and big kylikes with tall stems. The first class usually have only one handle, and the curve of the bowl is

inclined to be angular. The others have more regularly curved bowls and two handles. Both groups have handles of the vertical loop type. The smallest specimens are .09 m. high all over, but the stems alone of the tall examples are often taller than this.

Jar of coarse ware, with two semi-circular handles; height .185 m., diameter .35 m., tall and narrow-necked.

Of all these shapes the commonest were handleless cups, kylikes and the shallow bowls with ribbon handles. In view of the presence of painted and so many unpainted kylikes, the deposit can hardly be earlier than the beginning of L.H. III. On the other hand, so many handleless cups (which belong mainly to L.H. II.) were found with them that this deposit cannot be later than the very beginning of L.H. III.

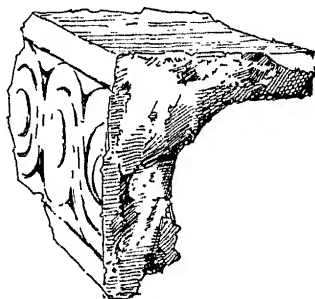


FIG. 39.—STEP OF PAINTED STUCCO FROM ROOM NORTH OF WESTERN PORTAL. (Scale about 1:3.)

With the pottery was found a fragment of a plaster step .22 × .107 × .11 m. (Pl. XXV. *a*, Fig. 39). It is unburnt and decorated with a spiral pattern between two stripes, the upper stripe yellow, the lower red. The scallops between the spirals are red above, yellow below; the spirals are white with black lines and filling, and centres alternately blue and yellow.

When clearing inside the west wall some small fragments of unburnt fresco were found, several with traces of pattern, one with imitation stone-work.<sup>1</sup>

A bronze knife (Fig. 40) was also found here. It is broken into several pieces, but is complete. It is .27 m. long with blade and haft all in one piece. At the end of the haft there is a flat knob, and it and the rest of the haft have a raised edge on each side, thus making a sinking

<sup>1</sup> To judge by the condition of the frescoes the western part of the Palace seems on the whole to have suffered less from fire than others; as for instance, the Megaron, the Room of the Throne and the Court.

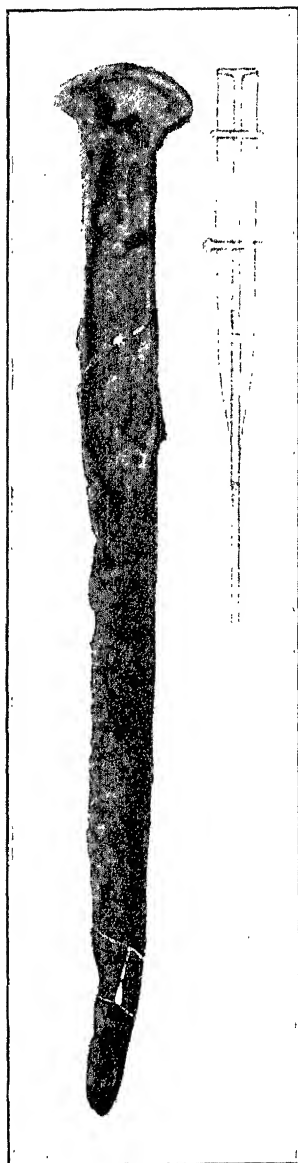


FIG. 40.—BRONZE KNIFE FROM ROOM NORTH OF WESTERN PORTAL. (Scale 1 : 2.)

to hold the wooden hilt. The hilt was composed of two pieces of wood, one laid into the socket on each side. Then they were bound together by long rivets (two of which are still preserved) fastened through them and the bronze haft from side to side. The blade has only one cutting edge and was about .02 m. wide, tapering towards the tip. This has a slight curve, which may, however, be accidental. This knife is not of an early type since it does not occur in the Shaft Graves; no exactly similar knife has been found at Mycenae. The nearest parallel to it is the so-called double knife found by Schliemann in the Grave Circle, but that is two-edged.<sup>1</sup>

#### DATE OF THIS PART OF THE PALACE.

The evidence of the fresco and of the knife, added to that of the pottery, confirms the opinion already expressed that this deposit belongs to the period at the end of L.H. II. and beginning of L.H. III. Since it was found well below the floor of this room we cannot date the room and the section of the Palace to which it belongs earlier than the beginning of L.H. III. The Western Portal in its present form must be of the same date as the south wall of this room, which is common to both and not earlier than the floor of the room. This date for the laying out of the plan of the Palace as we see it to-day agrees excellently with the observations already made above in discussing the finds in the Pithos Area and the Court and adjoining apartments. The wall below the floor to the east of the deposit probably belongs to an earlier form of the Palace, and since M.H. and

<sup>1</sup> Athens, *Nat. Mus.*, 1000; Schliemann, *Mycenae*, p. 164, Fig. 238.

L.H. I. pottery was found immediately to the east of it above the sloping rock, we can assign the wall in question to the First Palace.

## 12. THE NORTH CORRIDOR.

Immediately to the east of the doorway to the room just discussed there lies another threshold in the north wall of the South Corridor (level 72.07). This is composed of two blocks of conglomerate, one of which has a pivot-hole for a door. Once we enter the space to which it gives access (39), we find that the rock rises very rapidly, so that it would have been impossible to have had here a room with a floor at the same level as the threshold. Tsountas, who excavated this part, suggests, without giving any detailed evidence, that there was a staircase leading up to a higher level of the Palace to the north. The evidence of the existence of a door does not vitiate this theory. The threshold at the north end of the porch of the Megaron (55) has two pivot-holes for a double door, which gave access to a short staircase leading into the Lobby to the Domestic Quarters.<sup>1</sup> A similar staircase leading into the Northern Corridor (17, 18, 19, 20) might have stood here against the sloping rock. We have already suggested the possibility that the Northern Corridor ran due west down the slope into the inclined roadway leading up from the Propylon, but investigations here revealed no sign of anything whatever. Tsountas' suggestion is extremely attractive.

The plan shews that the space just within the West Portal (40) would thus have been a central starting-point for passages giving access to different parts of the Palace. Thence run the West Corridor leading into the Court, the South Corridor which originally ran direct to the Domestic Quarters, and, if we accept Tsountas' suggestion, the staircase that led up into the North Corridor.

The line of the North Corridor can now only be traced by the remains of its cement pavement, and here and there of its walls. Its ruins lie close below the foundations of the Doric temple, which have been responsible for so much damage to the Palace.

At the north end of the space (39), where we assume the staircase to have stood, there is a double wall. The southern wall is short and

<sup>1</sup> See below, p. 233.



in the same line as the north wall of Room 41, and may have served as a support for the staircase. The other wall, from the point where we enter the North Corridor (level 74.96, near 18), can be followed for nearly 13 m. eastwards, and beyond there is a cutting in the rock (21) running east in the same line for another 10 m., and shewing where the wall once was. Immediately to the north of this wall we found several patches of hard white cement pavement similar to that of the South Corridor. It rests on a solid packing of smallish rough limestone blocks, and we note that the level of the pavement rises rapidly from west to east. Thus this North Corridor corresponds closely with the South Corridor, to which it runs parallel. Both rise from west to east, and must have been main arteries of the Palace. The South Corridor was 1.70 m. wide, while the North seems to have about 2 m. wide so far as we can judge by measuring (by figure 18) between the threshold on its north side and the edge of the cement pavement to the south.

Just to the east and west of this same point (18) wall lines are to be seen running across from north to south in the fill below the cement pavement of the North Corridor and at a lower level than the threshold just mentioned. Further west again at a lower level (17) other remains of walls exist below the cement pavement, but running east and west. In one of these, just by figure 17, four grooves for thin transverse wooden beams running from side to side of the wall are still preserved in the clay mortar now baked hard by fire. The grooves are .70 m. long and .10 m. wide by at least .06 m. high. The height was probably originally greater. The ends were covered with clay plaster spread over the two faces of the wall. Some of the other pieces of wall recognizable in the fill further west are also covered with clay plaster. That these walls are plastered on their faces, and have wooden transverses, a method of building common at Tiryns, shews that they cannot have been intended originally to lie below the pavement of a corridor. Woodwork certainly, and clay plaster almost certainly, must have been intended to be above the ground level. We can perhaps recognize in these *dissecta membra* of earlier walls other remains of the First Palace which were robbed for building material and built over when the Second Palace was laid out.

In testing below the floor of this corridor we found very little pottery, but in one place by an earlier wall, probably one of those of the First Palace, we found the following :—

Early Helladic, one sherd.

Middle Helladic, Minyan ware, twelve sherds.

Matt-painted, Group B. I., nine sherds.

Group B. II., seven sherds.

Plain and polished ware, ten sherds.

Late Helladic I., one sherd.

This wall is just to the east of the threshold of the Shrine (between 17 and 18) and its top is only .30 m. above the level of the rock. The shallowness of the deposit on the rock in this region and the constant rebuilding have disturbed and swept away the stratification.

It is clear that the Second Palace was laid out on a uniform plan. The two great parallel corridors were an important feature of it. The South Corridor became somewhat atrophied in the later phase if it was cut short as suggested,<sup>1</sup> but the North Corridor still continued to be important. The whole of the terraced summit of the acropolis was occupied by the Palace, and this North Corridor was one of the principal, perhaps *the* principal avenue for reaching the highest terraces. At its east end (by figure 21) we see that the rock cutting which marks the line of its south wall meets at right angles with the wall running northwards from the South Corridor by the sawn threshold. Further on the north side of the North Corridor we find the remains of a row of chambers.

### 13. THE SHRINE AND ADJOINING CHAMBERS.

On the north side of the North Corridor (by figure 18) lies a large threshold of conglomerate, and on its east side a small slab of limestone with a dowel-hole. This threshold lies at right angles to a wall of crude brick (Pl. XXXVIII. *b*)<sup>2</sup> which is still partly preserved *in situ* to a height of .25 m. on a foundation of rubble masonry (level 75.75). Near this wall and along the west edge of the Doric temple foundations is part of a pavement of cement which clearly also belonged to a room (16), one of a series of chambers opening off the North Corridor. The southern part of the room near the threshold had been cleared by Tsountas; we excavated the northern part (Pl. XXXVIII. *a*). Above the cement floor we found a quantity of pottery, as follows:—

<sup>1</sup> See p. 207, above.

<sup>2</sup> The bricks are about .085 m. high, .575--.60 m. long and .315 m. deep, as far as can be ascertained.

Middle Helladic, Minyan ware, grey, five sherds.

Matt-painted Ware, Group B. I., seven sherds.

Group B. II., nine sherds, including part of a panelled cup similar to *Korakou*, Fig. 34.

Group D. I., light-on-dark, one sherd.

Polished and plain ware, thirteen.

Late Helladic I., two possible sherds.

Late Helladic II., handleless cups, a great number.

Late Helladic III., thirty-three sherds and part of a plain kylix.

Proto-Corinthian, fourteen sherds from at least two vases of a small skyphos type and four rough hand-made saucers, very small, and decorated with incisions; they are like biscuits. Fragments of others were also found.

With this pottery some small objects were found comprising two spindle whorls of the ordinary Mycenaean (L.H. III.) type, two terracotta spindle

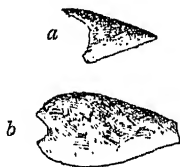


FIG. 41.—OBSIDIAN (a) AND FLINT (b) ARROWHEADS FROM THE SHRINE. (Scale 2 : 3.)

whorls of a conical shape, a small triangular piece of stone possibly from some inlay, two or three scraps of gold foil, a small carnelian bead, diam. .05 m., an amygdaloid bead of glass paste, length .015 m., another glass paste bead shaped like a grain of wheat, length .012 m., part of a small plaque of glass paste, a lead disc (.02 m. in diameter and .004 m. thick), a rolled bronze band (.02 m. in diameter, .007 m. wide), and an obsidian (.02 m. long) and a flint (.03 m. long) arrowhead (Fig. 41). The arrowheads are tangless, but have curved barbs: in the North Corridor near the Shrine a similar arrowhead of obsidian was found.

#### STUCCO ALTARS.

The same deposit also contained the remains of two movable altars, hearths, or tables of offering of painted stucco on a clay backing. One of these we were able to reconstruct. Tsountas found part of a similar altar in his excavations in the Palace in 1886.<sup>1</sup> These altars are of the

<sup>1</sup> See below, p. 226, No. III.

same type as those found in Crete, notably at Knossos in the Shrine of the Double Axes and in the L.M. I. house at Nirou Chani.<sup>1</sup>

I. Fig. 42, Pl. XXXVII. *d*. Reconstructed. Diameter, c. .40 m. Width of raised rim, .045 m.; depth of vertical face (broken), .045 m.; height of legs, about .14 m.

The raised rim is decorated on the top with a wavy black line between an exterior blue and an interior red stripe. The vertical face has a red wavy line between an upper red and lower blue (or black) stripe. The



FIG. 42.—STUCCO ALTAR I. (reconstructed) FROM SHRINE. (Scale 2 : 9.)

identical pattern is found on a fragment from Tiryns.<sup>2</sup> The centre of the altar is red.

On the leg, drawn in fine black lines, is a boar's tusk helmet (Pl. XXXVII. *a*). This is proved by a ring from Vaphio,<sup>3</sup> and another from Tomb 518, which shew a helmet of the same shape. That a helmet was used to decorate cult objects is shewn by the vase from the Tomb of the Polychrome Vases at Isopata,<sup>4</sup> to which this altar affords an important parallel. The leg is bordered by a wide black stripe.

II. Pl. XXXVII. *c*. Diameter, uncertain. Width of raised rim, .045–.06 m.; depth of vertical face (uncertain owing to break), c. .45 m.

<sup>1</sup> B.S.A. viii. p. 96; Evans, *Palace of Minos*, i. p. 437; 'Εφ. 'Αρχ. 1922, pp. 15 ff., Fig. 12; cf. Evans, *Prehist. Tombs*, p. 37, Fig. 33; *Antiquaries' Journal*, ii. 327; 'Αρχ. Δελτίον, iv. p. 77; Rodenwaldt, *Tiryns*, ii. p. 63.

<sup>2</sup> Rodenwaldt, *Tiryns*, ii. p. 63, Fig. 25.

<sup>3</sup> 'Εφ. 'Αρχ. 1889, Pl. X. No. 37.

<sup>4</sup> Evans, *Tomb of the Double Axes*, pp. 25, 27, Fig. 37, *b*.

On rim, alternate bars of red and blue; white ground. On vertical face a very indistinct, wavy red line<sup>1</sup> between two blue stripes; colour of ground uncertain. The centre of the altar is dark red.

III. Pl. XXXVII. *b*. Found in the Palace by Tsountas; the exact provenance is not known.<sup>2</sup> Diameter, c. .36 m. Width of raised rim, .055-.06 m.; depth of vertical face, .055 m. Athens, Nat. Mus. No. 2761.

The raised rim is decorated by a wavy red line between two red stripes; the stripes have each an inner edging of black. The decoration of the vertical face is uncertain; a blackish stripe can be distinguished and some red marks. The usual wavy line is suggested in the drawing, in which case the red marks noted above would be accidental. The centre is a red circle bordered by two black circles and with an outer circle of white.

Here we also found fragments of coarse plaster, mostly yellow or white, one or two blue, probably from the walls. From a total of fifty-one pieces, only five shew definite signs of burning, eight are definitely unburnt, the rest probably unburnt.

#### STRATIFICATION.

Some .20 m. below the cement floor appeared a clay floor, and on it lay a small slab of limestone, measuring  $.46 \times .35 \times .07$  thick, which shewed signs of having once been covered with red stucco. We accordingly made a test of the stratification of this room from above the cement floor down to the rock, with the following results.

The first layer above the cement floor gave :—

Middle Helladic, Minyan ware, grey, one or two small sherds.

Matt-painted, Group B. I., two sherds.

Group B. II., one sherd.

Late Helladic II., handleless cups, fourteen fragments.

Late Helladic III., three pieces.

Proto-Corinthian, two sherds.

And a quantity of plain ware of the M.H. and L.H. periods.

The second layer between the cement floor and the clay floor below gave :—

<sup>1</sup> The red line is so much rubbed away that it is impossible to tell for certain whether it is a tooth pattern or a wavy line, but the latter is more probable.

<sup>2</sup> See also p. 170 for fragment of altar with spirals found by Tsountas.

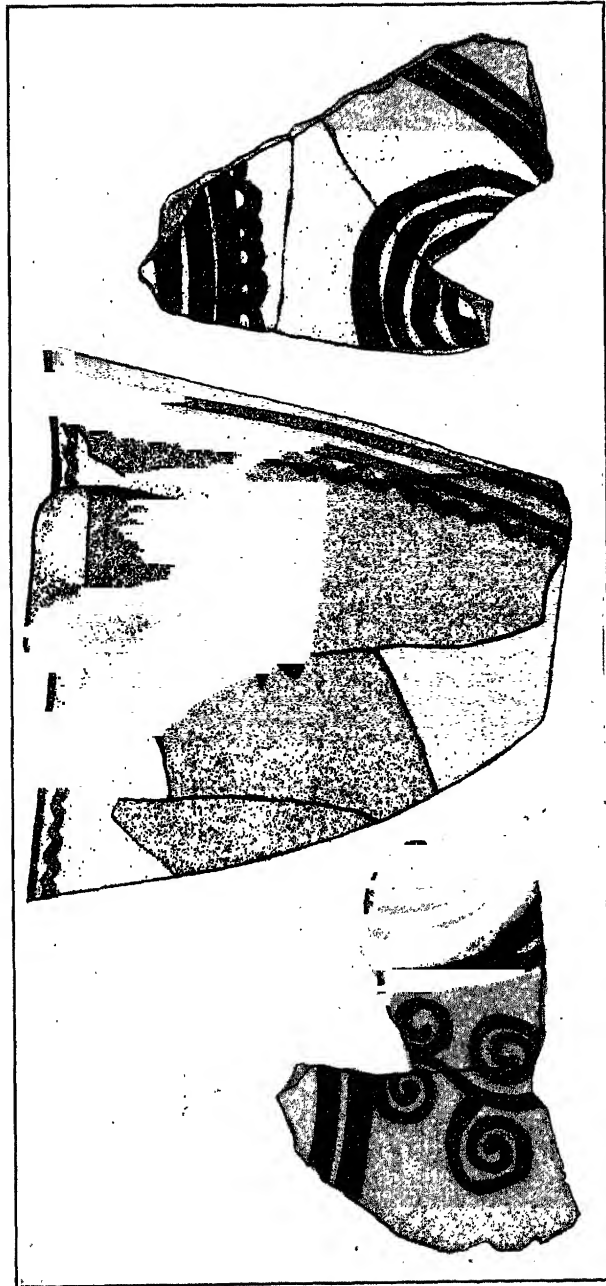


FIG. 43.—MIDDLE HELLADIC POTTERY (MATT-PAINTED, GROUP B. II.) FROM THE SHRINE. (Scale 1:2.)

Middle Helladic, Minyan ware, grey, two or three sherds.

Matt-painted, Group B. I., thirty-three sherds.

Group B. II., seventeen sherds, which include two fragments from an interesting vase with spiral patterns, Fig. 43, *a*, *c*.

Plain and coarse ware, a considerable amount, including a tall, narrow-necked, two-handled jar of red ware, with a potter's mark of three vertical strokes incised at the base of one of the handles (height .39 m., diam. .265 m., Fig. 44).

This seemed to be a Middle Helladic stratum with slight Late Helladic intrusion.

The third layer from the clay floor down to the uneven surface of the rock some .20 m. below gave :—

Early Helladic, three sherds.

Middle Helladic, Minyan ware, grey, six sherds.

Matt-painted, Group B. I., seven sherds.

Group B. II., seven sherds, including a fine fragment of a panelled cup,

Fig. 43, *b*, of a metallic type like one from Korakou (*Korakou*, Fig. 34).

Plain, polished and coarse ware, a good deal.

Late Helladic III., one possible sherd, perhaps intrusive.

The general impression given by this stratification is that the uppermost level above the cement floor is late L.H. II. or early L.H. III., the second layer is late M.H., and the third or lowest layer is late M.H. also, for in spite of the appearance of three E.H. sherds there is practically no Minyan ware here. The soil, however, was not deep and there seems to have been some disturbance, first due to the building of the Second Palace and later to the building of the Doric Temple; it has also been affected by the previous excavations. We get, however, the impression that here too, at the building of the Second Palace some levelling was done, otherwise it is not easy to see how the strata telescoped, so that L.H. III. ware comes below the cement floor with M.H. pottery with no L.H. I. or II. ware intervening. The cement floor is contemporary with the conglomerate threshold and probably also with the wall of crude brick. The finding of handleless cups above the cement floor need not surprise us. We put the building of the Second Palace early in L.H. III., and we have already seen (pp. 150 ff., 218) that such cups continued in use till that time.

The presence of the altars in this chamber has caused us to dub it the Shrine. In the Shrine of Double Axes at Knossos, which is of L.M. III. date, a great number of small cups and jugs of clay were found.<sup>1</sup>

<sup>1</sup> *B.S.A.* viii, pp. 96 ff.

It is unfortunate that this very interesting part of the Palace has been not only telescoped, but also partly built over by the Doric Temple. The temple runs north and south, though with a slightly different orientation from this supposed Shrine. This is the more remarkable when we reflect that the builders of the temple had to throw in great masses of



FIG. 44.—JAR OF DOMESTIC WARE (M.H.) WITH POTTER'S MARK, FROM SHRINE. (Scale 1 : 4.)

fill on the north and south slopes to support the foundations, whereas if they had built east and west they could have founded it on the solid rock from end to end, and there would have been no need to make artificial terraces.

#### THE CHAMBER OF PITHOI.

Directly to the west of the Shrine is part of another chamber (11) with floor and walls covered with white stucco. Part of its east wall is



preserved, but it does not run parallel with that of the Shrine, and thus suggests there was probably some alteration of the Palace here in the L.H. III. period. On the floor against the east wall we found the fragments of two large pithoi of coarse ware which had stood on the floor upside down, and had suffered much from fire (Pl. XXXVIII. *a*). The larger pithos was .55 m. in diameter at the lip, and the smaller about .40 m. By them we found other pieces which came from yet a third pithos. The cement floor of this room is broken off to the west, where it can clearly be seen to rest on a layer of rough limestone fill. In this fill below the cement floor we found many fragments of painted stucco much burnt, which must have come from an earlier stage of the Palace and in all probability belonged to the First Palace, as it includes some fragments of good quality with remains of patterns, a spiral, a rosette, and stripes. All to the west and north-west of this chamber is obscured by the heavy mass of rough limestone fill which was thrown in by the builders of the Doric Temple. It seems that after the fire which destroyed the Second Palace, the corners of the building collapsed, especially in its higher levels and those resting on artificial terraces. Then the builders of the temple threw in limestone fill over the ruins, at the same time robbing them of any material that might be useful.

Just west of the threshold of the Shrine another threshold block of conglomerate lies on the slope (near figure 17). This is no longer *in situ*, but may easily be only a little out of place. We would suggest that it was the threshold of this Chamber of Pithoi, and lay originally in the north wall of the North Corridor immediately to the west of and in the same line as the threshold of the Shrine. The fill to the west of this (and north of the North Corridor) is probably Mycenaean in origin, but has been disturbed in archaic Greek and Hellenistic times. At one point we found E.H. pottery, including a few pieces of sauceboats,<sup>1</sup> on the rock below it, and at another point late Greek tiles.

To the east of the Shrine, just beyond figure 12, the line of a Mycenaean wall is visible between and below the temple foundations. This may have been the east wall of the Shrine. Further east still, among the temple foundations (by figure 13), we have part of a cement floor (level 76.49), of an east wall and of a possible north wall. Both the walls seem to have the same general orientation as the Shrine and

<sup>1</sup> Cf. Blegen, *Korakou*, Pl. I. (1), Figs. 4, 6, pp. 6, 7.

Chamber of Pithoi and may very well have formed part of another chamber opening off the North Corridor.

Among the substructures of the temple we found a few pieces of fresco: (*a*) coarse fragments, red, yellow and white; (*b*) fine fragments, white or red. All were more or less burnt. Two large conglomerate column bases ( $\cdot 35$  to  $\cdot 40$  m. thick, and about 1.10 m. in diameter) are to be seen built into the north-east angle of the temple foundations. Near by is yet a third base built into the same foundations, but in such a position that it cannot be measured; it seems, however, to have been approximately of the same dimensions. These column bases taken in

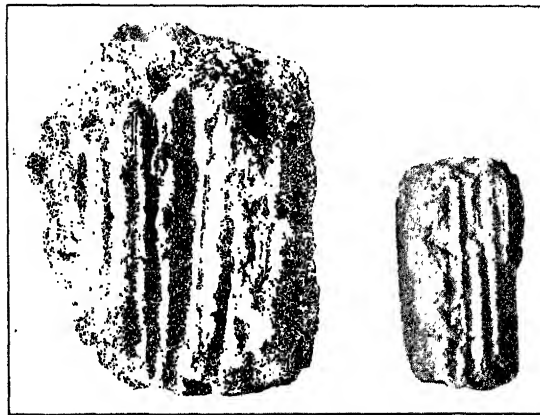


FIG. 45.—FRAGMENTS OF CLAY ROOFS OF PALACE, SHEWING IMPRESSIONS OF REEDS. (Scale 1 : 3.)

conjunction with a rectangular slab of conglomerate in the north-west angle of the temple foundations would indicate that a colonnaded hall once stood here. The bases, which are almost of the same size as those by the Propylon (see above, p. 211), are too large to have been moved far even by the temple builders. From their size they should have carried columns between 3 and 4 m. high, to judge by the Knossian analogies (see above, p. 211).

Unfortunately, all the rock here (14) lies almost directly below the temple foundations. Those who built the Doric Temple seem to have shaved off the uppermost summit of the acropolis and therewith practically every vestige of the Palace buildings. We must be thankful at least that they built these column bases into their foundations, for from

them we can imagine one of the larger and more important halls of the Palace to have crowned here the very summit of the citadel of Atreus. Such heavy column bases would have been more likely to have been part of a colonnaded hall or court on the ground floor, but with the palaces of Knossos and Phaistos before us, we cannot omit the possibility that they might perhaps have stood in some *piano nobile* on the first floor.

Among the débris covering this part of the Palace we found four fragments of the clay ceilings or roofs. They had been baked hard by the fire which destroyed the Palace, and so (Fig. 45) still preserve the impressions of the reeds and brushwood which were laid across the flat roof beams to support the thick clay roof.<sup>1</sup>

#### 14. THE MEGARON.

Having surveyed all the rest of the Palace to the west and north-west of the Court we now return thither to consider the Megaron itself which once adorned its east side.<sup>2</sup>

The Megaron as usual is divided into three parts, the Porch (55), the Vestibule (56), and the Megaron proper (57).

#### THE PORCH

The Porch forms the east side of the Court, and opens directly on to it between two columns *in antis*. The column bases are of conglomerate and are .57 m. in diameter, and about .37 m. thick. When we began our re-examination of the Court and Megaron, we found the northern column base out of place. This gave us an opportunity to examine its foundations. It rests on a flat rectangular slab of conglomerate with its long sides parallel to the north wall of the Court. The slab is about 1.09 m. × .74 m., and well cut on three sides. The under side of the column base is rough, but sits well when wedged up on the level surface of the conglomerate slab below. The southern column base rests on a similar conglomerate slab, as do the column bases in the Megaron proper. The rest of the Porch is floored with slabs of gypsum which lay with their long sides running north and south, except in the north-east angle where the gypsum slab

<sup>1</sup> Cf. Schliemann, *Tiryns*, p. 274.

<sup>2</sup> Tsountas, *Πρακτικά*, 1886, pp. 65 ff.; Tsountas-Manatt, *Mycenaean Age*, pp. 56 ff.; cf. Doerpfeld's account of the Tiryns Megaron in Schliemann's *Tiryns*, pp. 208 ff.

is replaced by a rectangular piece of cement flooring. Presumably, the gypsum was imported from Crete, since, so far as is known at present, no gypsum is to be found in the Peloponnese or elsewhere on the mainland of Greece.

The south wall of the Porch is ruined, all but its foundations. The north wall was pierced by a doorway marked by a large threshold of conglomerate with two pivot-holes for a double door. The east wall is pierced by a doorway in its centre (Pl. XXXVIII. c). This is paved with a large threshold of sawn conglomerate, which has at each end two dowel-holes for fastening the wooden door-frame in position, and on the inside a ledge for the door to rest against.<sup>1</sup> There is also a pivot-hole in the south-east corner for a single door. In this pivot-hole Tsountas found remains of the round bronze knob which apparently tipped the lower pivot of the door, which he thinks was of wood.<sup>2</sup>

The east wall is built of rubble and faced on the west side with two rows of ashlar blocks of poros which are still *in situ* in the north part—there are signs that such existed in the south part too. A horizontal wooden beam probably rested on the lower row of ashlar blocks as in the Court. Above the upper row of ashlar blocks (which unfortunately have been much damaged by fire and have lost their outer edges so that one cannot now tell whether they once had dowel-holes like those in the west wall of the Court) there was possibly another horizontal wooden beam. This may have served as the sill of a window, to light the vestibule within, balanced perhaps by another on the other side of the door. This is indicated in the sketch reconstruction seen in Fig. 38.

According to the diameter of the column bases and the Knossian analogies,<sup>3</sup> the columns of the Porch would have been not more than 3 m. high. This would make impossible any such restoration of the front of the Megaron as those given by Perrot and Chipiez.<sup>4</sup> On the other hand, the columns of the Tomb of Clytemnestra were over 6 m. high, and stood on bases only .39 m. in diameter. Still we must remember that those columns were decorative and not an organic part of the structure like these two in the Porch which had to carry the roof above. Two slender wooden columns 5 or 6 m. high, carrying the beams which spanned the opening of the Porch to the Court, would not make for the stability of the whole.

<sup>1</sup> The door opening was nearly 2 m. wide.

<sup>2</sup> *Практика*, 1886, p. 66.

<sup>3</sup> See above, p. 211.

<sup>4</sup> *Hist. de l'Art*, vi. p. 689, Fig. 302, Pl. XI.

There is one other point to be noted. The sawn conglomerate threshold imbedded in the north wall of the South Corridor (35) is at level 75.50 (see above, p. 207), and the cement floor to its north is at level 76.15. It would be reasonable to imagine that the roof of the Porch would be about on a level with the threshold of the South Corridor or of the floor just behind it, if, as suggested above, one of the original objects of the South Corridor was to give access to a loggia over the Porch. As the level of the



FIG. 46.—N.E. CORNER OF PORCH: ASHLAR WORK IN POROS WITH REMAINS OF PAINTED STUCCO COATING.

floor of the Porch is 72.15, we see that a roof (the upper surface of which would serve as the floor of a loggia above) on the same level approximately as that of the threshold or the cement pavement behind it would require columns 3 m. high, carrying an architrave about .50 m. thick, and a floor also .50 m. thick. The sketch restoration, Fig. 38, is based on these calculations, and the levels of both the threshold and the cement pavement behind it are shewn. Above the Porch then of the Megaron we could restore a loggia with a balustrade over which the royal household could

watch the games in the Court below, as seen in the well-known fresco found by Schliemann below the Ramp House.<sup>1</sup>

#### DECORATION OF WALLS.

In the north-east angle of the Porch part of the painted stucco decoration is still preserved although considerably damaged by fire (Fig. 46). This consists of a dado identical with that of the Court, and the two may fitly be described together. They are placed under this heading because more of the pattern is preserved in the Porch than in the Court.

The dado was originally .55 to .65 m. high. It was bordered above, presumably by the wooden beam mentioned on p. 233, which would most probably be covered by a plaster imitation of woodwork. The socket left by this beam in the east wall measures .30 to .35 cm. The main frieze must have begun at the height of almost 1 m. The dado was decorated with the so-called 'triglyph' pattern: a fan-shaped ornament between upright bars. This is preserved in two places:—

(i) Court: on the north wall, above square No. 1a of the floor, west of the return by the staircase. Length .75 m.

(ii) Porch: north-east corner, and east wall. Length .53 m. on north wall, and .87 on east wall. Pl. XXXV. a.

The half-rosette ornament is white on a black ground,<sup>2</sup> with red and black lines. The triangular filling is red and yellow. Of the upright bars, the two outer ones are orange (originally yellow), the central one, where visible, red. Below is first a white stripe, then a grey (probably once blue).

The plaster is applied to the face of the ashlar work. It is preserved to a maximum height of 20 cm., the two stripes being .115 to .135 m. high. It has not suffered from fire to any great extent.

The lower edge of the half-rosette ornament is sufficiently preserved to indicate the nature of the pattern but not to define its proportions. The middle half-rosette appears broader than those on the right and left. In the case of the one on the right, this is probably due to the fact that the Mycenaean decorator worked mainly by eye. The one on the left is on the north wall and therefore comes against the north-east corner. Was it shortened to fit into the space and end at the corner? This would be contrary to the usual practice of Mycenaean decoration, where corners are regularly ignored.<sup>3</sup> It is, however, consistent with the remains of the painting and with the architectural character of the motive.<sup>4</sup>

<sup>1</sup> *B.S.A.* xxiv. pp. 189 ff.; *Ath. Mitt.* 1911, Pl. IX.

<sup>2</sup> On the north wall the black is now a dull brown.

<sup>3</sup> Rodenwaldt, *Tiryns*, ii. p. 33; e.g. the rosettes, *op. cit.* Fig. 72.

<sup>4</sup> The motive is generally agreed to be architectural both by those who regard it as a frieze and those who regard it as a dado; *A.J.A.* 1917, p. 127.

The type of the half-rosette seems to be that on the red porphyry border from Mycenae.<sup>1</sup> Its discovery *in situ* is particularly interesting, for it affords additional evidence that the half-rosette ornament is connected with the base rather than with the top of a wall.<sup>2</sup>

A list of other examples of the half-rosette pattern is given by Holland.<sup>3</sup> To this add :

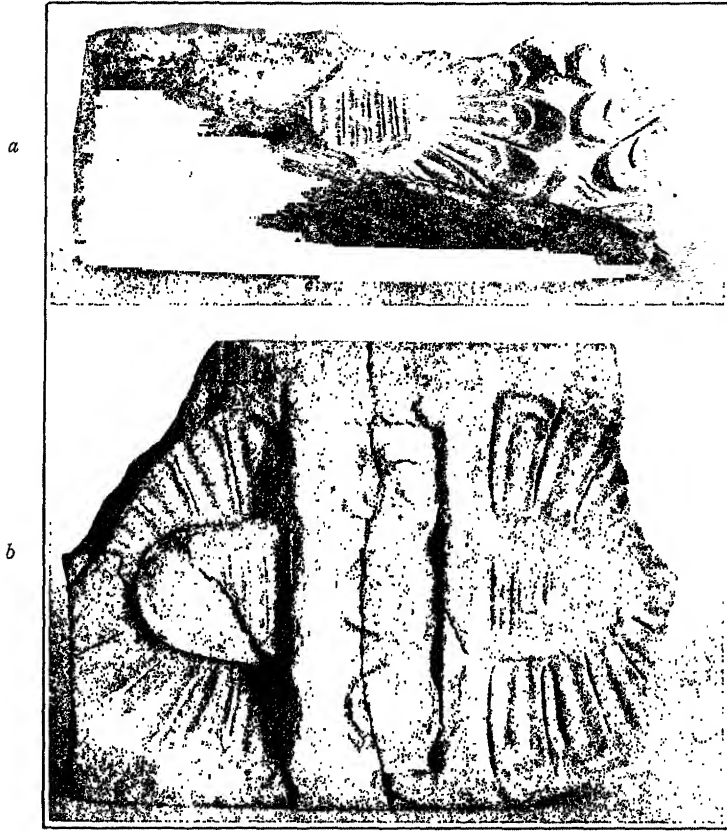


FIG. 47.—FRAGMENTS OF DECORATIVE FRIEZES IN STONE; *a*, FROM PROPYLON OF PALACE; *b*, FROM HELLENISTIC GYMNASIUM. (Scale *a* 3:7, *b* 4:9.)

(i) The fresco from the Ramp House.<sup>4</sup>

(ii) Fig. 47, *b*, found in the Gymnasium, measuring  $\cdot 18 \times \cdot 137 \times \cdot 035$  m. It is of yellowish limestone, with traces of a dark blue stain, probably paint, all over it. Such a covering of paint would naturally account for its unfinished style.

<sup>1</sup> Schliemann, *Mycenae*, Fig. 151.

<sup>3</sup> *Ibid.*

<sup>2</sup> *A.J.A.* 1917, p. 126.

<sup>4</sup> *B.S.A.* xxiv. Pl. VII. 2, p. 192.

(iii) Fig. 47, *a*, from the Propylon,<sup>1</sup> measuring over all  $\cdot 21 \times \cdot 14 \times \cdot 035$  m.; but only the narrowest face is decorated, and the decoration measures only  $\cdot 112 \times \cdot 045$  cm. The relief is so deep as to give the impression, wrongly, that the surface is curved. The limestone is a dark grey. This must have been part of a larger decoration, but what the object was we cannot tell. Another fragment of the same stone, worked but without the decoration, was found in the Propylon.

In the earth immediately covering the floor of the Porch were found five pieces of burnt fresco and two pieces unburnt.

The burnt pieces were rather coarse, grey, blue, purple, or yellow, resembling these from the Vestibule.

Of the unburnt pieces, both appear to come from the edge of a step, and must have been brought into the Porch by some fall of earth. The larger is illustrated on Pl. XXV. *b*, 7. The top is  $\cdot 045 \times \cdot 052$  m., showing a yellow stripe and the red centre of what was once a spiral. The side is  $\cdot 03 \times \cdot 05$  m.; with white arcade pattern on blue ground containing a red rosette. The outline of the white and the centre of the rosette are black; below, a yellow stripe. The pattern is only interesting as being a small edition of that on the dado in the Lesser Megaron at Tiryns.<sup>2</sup>

#### THE VESTIBULE.

The Vestibule (56) is entered from the Porch by the doorway already mentioned (Pl. XXXVIII. *c*, *d*). In the centre of its east wall is another doorway paved by a large slab of sawn conglomerate which has two dowel-holes at each end for fastening the door-frame.<sup>3</sup> This threshold has no pivot-hole and no ledge for a door to rest against. It probably was not closed by a door, but masked simply by a curtain hung over the opening when required. The walls of the north end still stand to a height of over 2 m. The east, north and west walls are built of rubble faced with painted stucco, and the process by which this was applied can be seen very clearly. Directly over the rubble work is laid a coat of clay plaster with a scored surface to enable the stucco to bite on to it. Over this came a layer of coarse stucco and finally a thinner coat of smooth fine stucco was laid over all and then painted. Some of this is still preserved *in situ* on the walls in the north-east angle, and many other pieces were found on the floor at the north end of the room lying as they had fallen from the wall when the Palace was destroyed by fire.

<sup>1</sup> See above, p. 210.

<sup>2</sup> Rodenwaldt, *Tiryns*, ii. Fig. 72, p. 167.

<sup>3</sup> The opening is about 1.80 m. wide.



They are much calcined and very badly discoloured, being burnt to a greyish-purple or yellow, so that no pattern can now be distinguished. An incised line ran round the walls at a height of .83 m. above the floor.

The floor is covered with painted stucco enclosed by a border of gypsum slabs, which are set with the short sides always against the wall. The painted area is divided into a series of rectangular panels and has been described by Tsountas<sup>1</sup> and Rodenwaldt,<sup>2</sup> but the removal of the ruinous temple foundation at the north end revealed the uppermost row of panels and necessitates a fresh publication, Pl. XXXIII. *b*.

As some of the rectangles are incomplete, measurements were not always possible.

The eastern row measures .685 m. from east to west : from north to south the top row measures .67 m., and the second row .708 m. The row on the west is now burnt black, but the sequence of ground-colour can be deduced from the others : blue, red, blue (top row) ; yellow, blue, red (second row) ; blue, yellow, blue (third row). The red and yellow are burnt to almost the same tone.

The dividing lines are dark red ; the pattern is the ' herring-bone ' or zigzag pattern in alternate black and red lines with white spots on the black, as in the Court.

Above the floor of the Vestibule at the north end, in clearing away the débris which from its calcined state showed clearly that the fire which had destroyed the Palace had raged furiously just here, we found a little pottery as follows :—

Middle Helladic, Minyan ware, grey, one sherd.

Late Helladic I.–II., three sherds, including two fragments of handleless cups.

Late Helladic III. ; all the rest was of this period and included much coarse ware. There were several pieces of deep bowls, one of which has the head of a man executed in the usual style.<sup>3</sup> There were, however, no whole vases, so that this pottery cannot be considered to represent the floor deposit at the time of the destruction of the Palace, but rather casual accumulation after the fall of Mycenae.

In the south part of the Vestibule where the stucco floor is damaged we made a test down to the rock in the hope of finding pottery to date it, and also to ascertain whether it rested on an artificial terrace or not. Below the floor was a thin layer of earth about .30 m. thick. Under this

<sup>1</sup> *Πρακτικά*, 1886, p. 66.

<sup>2</sup> *Jahrbuch*, 1919, p. 90.

<sup>3</sup> Cf. Schliemann, *Tiryns*, Pls. XIV, XV, XVII *b*.

comes a layer of limestone chips, and then begins a fill of rough limestone blocks with a little earth and some potsherds among it, which runs down to the rock. The fill goes below the gypsum slabs, and so is the original fill of the artificial terrace which was here constructed to carry the Megaron. We thus see that, like the Court, the Room of the Throne and the Pillar Basement, the Megaron was built on an artificial terrace partly cut out of the sloping hillside, and partly made up of fill thrown in behind heavy retaining walls. The south wall with part of the Vestibule itself has fallen away down the precipice on this side owing to the collapse of the retaining wall.

The pottery was :—

First layer, 72.01 to 71.36 :

Early Helladic, two sherds.

Middle Helladic, Minyan ware, grey, six sherds.

Matt-painted, Group B. I., four sherds.

Polished and plain, sixteen sherds.

Late Helladic II., handleless cups, one piece.

There was also part of a coarse rectangular tile, wide at one edge so that it can stand and tapering towards the opposite edge. There is a hole bored through it about the middle; it does not look like a drain tile, but perhaps may have been a spit rest.

Second layer, 71.36 to 70.64 :

Early Helladic, one sherd.

Middle Helladic, Minyan ware, grey, six sherds.

Matt-painted, Group B. I., ten sherds.

Polished and plain, thirteen sherds.

Late Helladic, two pieces.

The third layer from 70.64 to 69.92, when rock was reached :

Early Helladic, three sherds.

Middle Helladic, Minyan ware, grey, three sherds.

Matt-painted, Group B. I., one sherd.

Group B. II., two sherds.

Plain and polished, fifteen shreds.

#### THE MEGARON PROPER.

The Megaron is entered only by the doorway in the centre of its west wall, where the absence of a pivot-hole seems to indicate that there was no door but only a curtain or some similar hanging to close the opening when necessary. The Megaron is a large room about 13 m. long by 12 m.

wide. The walls are of rubble and were covered with painted stucco of which only small traces remain here and there on the north and west walls. Both walls shew traces of having once had horizontal wooden beams set in them and also, especially the north wall, transverse timber ties running through the thickness of the wall. These timbers all doubtless were connected with a wooden framework set, like that in the South House,<sup>1</sup> in the masonry base and, projecting above it, to strengthen the superstructure of crude brick. Just beyond the north wall of the Megaron a certain amount of burnt crude brick from the upper walls can be seen. The north and west walls still stand to a height of about 3 m. (Pl. XXXVIII. *d*).

#### THE FLOOR.

The floor was covered with a border of gypsum slabs as in the Vestibule, with their short ends always set towards the wall, and in the centre with a floor of painted stucco divided into panels. About this floor a word or two should be said by way of supplement to the description by Rodenwaldt.<sup>2</sup>

There appear to be at least five layers of plaster, which can most easily be counted where broken near the hearth. The sectional drawing, Pl. XL. shows how each layer of floor plaster ran right under the layer of plaster on the hearth to which it corresponds: this indicates that the floor was always decorated first.

Of the five layers which can be distinguished, the lowest (*a*) runs to the poros foundation of the hearth; a red stripe surrounded the hearth. (*b*) is probably contemporary with the second layer, (*c*) is uncertain, (*d*) is the layer described by Rodenwaldt with red lines forming squares which do not run in a line with the axis of the Megaron. It probably belongs to the eighth layer of the hearth. (*e*) appears to belong to the ninth rather than to the tenth layer of the hearth; though there are no traces of a pattern on the piece preserved near the hearth, it is probably identical with the remains in the north-west corner described by Rodenwaldt as decorated with a zigzag pattern.<sup>3</sup>

The other three places where the floor plaster can be distinguished are: (i) on the north side by the gypsum slabs; (ii) in the north-west

<sup>1</sup> See above, pp. 87 ff., Fig. 20.

<sup>2</sup> *Jahrbuch*, 1919, p. 88.

<sup>3</sup> *Ibid.*, p. 89.

corner : the details are given by Rodenwaldt ; (iii) to the west of the south-west column base, where the floor has sunk owing to the fill beneath it giving way ; in consequence it is much broken.<sup>1</sup>

#### THE HEARTH.

In the centre of the room is the painted hearth, the re-examination of which was carried out in great detail. Fresh breakages, which had occurred since Tsountas discovered it in 1886,<sup>2</sup> enabled us to determine its structure and distinguish the ten layers of painted stucco of which its moulded border is composed (Pls. XXXIX., XL.). These are of particular interest, for it had been originally supposed that there were only five. They are the result of constant redecoration, each fresh layer being superposed on the old one. Conservative taste or religious associations made the decorators reproduce again and again, with very few exceptions, the 'wave and star' or 'notched plume' ornament found on small movable hearths and tables of offering of clay overlaid with stucco from Knossos and elsewhere.<sup>3</sup> The resemblance between these and the Mycenae hearth suggests that the latter should itself be regarded as a large immovable altar or table of offering rather than as a hearth for purely domestic uses.

Another discovery was that it is built up on a ring of poros enclosing a clay centre, all being overlaid with plaster.

Of the whole hearth, once a perfect circle, only an arc remains ; at the western and the eastern end are the breakages where the inner layers can be seen. The total diameter is calculated to have been 3.70 m. A trench dug across the space once covered by the whole of the hearth shewed first a stratum of red clay (burnt), below this a stratum of black earth, burnt matter, and pebbles : below this, again, was the loose limestone fill which forms the supporting terrace of the Megaron.

In the central portion of the hearth, which is framed by the moulded rim, it is only possible to count six layers. The upper three are burnt ; the next below these shews incised lines, once part of circles running parallel to the moulded rim ; the two lowest are very close together. Probably here also were originally ten layers, some being now indistinguishable

<sup>1</sup> Above the floor of the Megaron we found two fragments of painted deep bowls of ordinary L.H. III. style. They prove nothing but that the Megaron was in use at that period.

<sup>2</sup> *Πρακτικά*, 1886, p. 67.

<sup>3</sup> Evans, *Palace of Minos*, i. p. 551 ; see above, p. 225.

because welded together by the action of fire. Ten layers, therefore, are shewn on the section, Pl. XL.

The ten layers of the moulded rim are described below, numbered from the lowest upwards: the letters refer to the different mouldings, as will be seen from the sectional drawings, Pls. XXXIX., XL. In some cases the pattern can be seen only in the break at one of the two ends of the hearth, but the evidence is never contradictory.

1. (A) Not visible.  
(B) .06 m. Red wave-pattern on white; red inner border. Pl. XLI.
  2. (A) .055-.075 m. Black and white wave or tooth pattern, with red spots. Blue stripe above, red below. Pl. XLI.  
(B) .047-.035 m. Red wave-pattern, white ground, red stripe above. It is possible the ground may have been yellow as in 4 (A). Pl. XLI.
  3. (A) c .05 m. Black wave pattern, red rosette, white ground. Red stripe above and below. Pl. XLI.  
(B) c .047 m. Plain blue ground with narrow red stripe at inner edge. Pl. XLI.  
(C) Height uncertain. Red wave with black rosette and red stripe below.<sup>1</sup> Pl. XLI.  
(D) c 18 m. Spiral pattern—centres blue, lines red, scallops red and blue: inner edge red stripe, outer edge red and blue stripes.<sup>2</sup> Pl. XLI.
- The mouldings (C) and (D) are only visible on the third layer.<sup>3</sup>
4. (A) .09-.095 cm. Yellow ground with traces of black wave pattern. Blue stripe above, red below. Pl. XLI.  
(B) .05 cm. Yellow, with red stripe at inner edge, blue at outer edge. Pl. XLI.
  5. (A) .075-.085 m. Black wave pattern; red rosette with white centre on white ground. Red stripe above, blue below. Pl. XLI.  
(B) .055 m. Red (?) wave pattern on white ground, between blue stripes. Pl. XLI.

N.B. This layer is unusually thick, which suggests there may have been one between it and the fourth layer.

<sup>1</sup> There are traces of an extra layer between 3 (C) and 4 (C) which cannot be accounted for.

<sup>2</sup> Tsountas' illustration (*Πρακτικά*, 1886, Pl. 5) gives a yellow ground between the spirals; this may be error, or the yellow may have faded since the first discovery of the hearth.

<sup>3</sup> A small fragment of a plaster hearth, with a rounded edge, was found in the neighbourhood of the hearth. See Pl. XXV.*b*, No. 8. The upper surface had a spiral pattern: white spirals, red centres, yellow filling. The side had scallops drawn in black and red on ochre. It is possible this fragment came from (C) and (D) of one of the innermost layers of the Megaron hearth.

6. (A) .80 m. Black wave pattern, red rosette, white ground. Red stripe above, blue below. Pl. XLI.  
(B) .07 m. Red wave pattern, black rosette, on white ground, between blue stripes. Pl. XLI.
7. (A) .08 m. Black wave pattern, red rosette, white ground; red stripe above, blue below, as in 6 (A).  
(B) .07-.065 m. Not visible.
8. (A) .1 m. Red wave pattern on white ground. Pl. XLI.  
(B) .75-8 m. Traces wave pattern (colour lost) with red border above. Pl. XLI.
9. (A) .11. Traces of wave pattern very indistinct.  
(B) .75 m. Red wave pattern, bluish-white ground. Pl. XLI.
10. {<sup>(A)</sup>  
(B)} Only a few pieces of plaster remaining.

Notice the variations in the outline of the wave : curved in the first layer, angular in the second, very carefully shaped in the fifth and ninth, very upright in the eighth.

In digging by the hearth we made a trench across its broken edge to see if the pottery found below it would give any evidence for dating it. This yielded :—

Middle Helladic, Minyan ware, grey, six.

Matt-painted, Group B. I., four sherds.

Late Helladic I.-II., painted, three sherds.

Red or black glazed, twelve sherds.

Handleless cups, several fragments.

Late Helladic III., four painted sherds, four fragments of terracotta figurines of animal and two stems of plain kylikes.

There was also a quantity of sherds of polished or plain M.H. ware of the Yellow Minyan style of L.H. I.-II.

Another test near by gave :—

Middle Helladic, Minyan ware, grey, five sherds.

Matt-painted, Group B. I., seven sherds.

Plain and polished and Yellow Minyan (some of which may be L.H. I.-II.), thirty-three sherds.

Late Helladic I.-II., four sherds.

Late Helladic III., four pieces.

Late Helladic, indeterminate painted, six sherds.

Under the hearth itself we found E.H. and M.H. pottery, and one fragment of plain L.H. ware, probably part of an L.H. III. kylix stem.

Round the hearth stood four columns which rested on conglomerate bases (Fig. 48). Only two bases are left *in situ*, the north-eastern and the

north-western, which still bears on its upper surface fragments of bronze plate, perhaps indicating that the end of the wooden column was shod with this metal. Under these we found one L.H. III. piece, and many M.H. sherds. The great mixture of pottery found here by the hearth must be attributed to the fact that it comes from made ground, and was presumably among the soil and stones when they were brought and dumped here to make up the terrace. There is nothing, however, in the pottery which

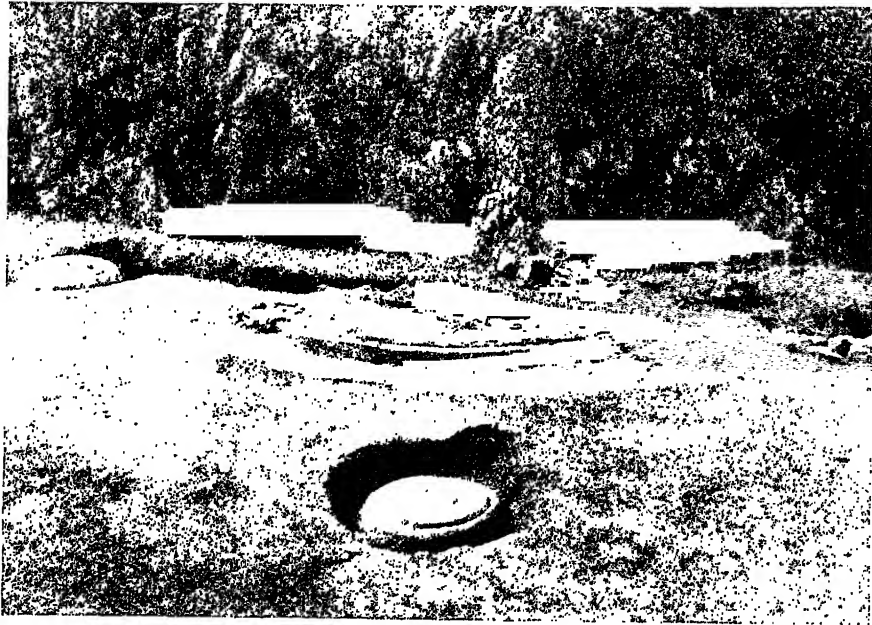


FIG. 48.—MEGARON: HEARTH AND COLUMN BASES FROM NORTH-WEST.

conflicts in any way with the other evidence for the date of the Megaron.<sup>1</sup> The limestone fill is uniform and gives no hint of any change of level or plan.

Of the south-western base only the foundation block remains. This, like those for the bases in the Porch, is a rectangular slab of conglomerate,  $\cdot97 \times \cdot70$  m., with its long sides parallel to the threshold. Of the south-eastern base nothing is left, for the whole of the southern and most of the eastern sides of the Megaron have slid away down the precipice owing to the collapse of the retaining wall.

<sup>1</sup> See below, pp. 245 ff.

## THE CONSTRUCTION AND DATE OF THE MEGARON.

We have already seen in connection with the staircase that the terrace wall which held up the fill on which the Megaron was erected must have collapsed fairly soon after the destruction of Mycenae, for the builders of the Doric Temple had to support the temple platform at its south end by the oblique retaining wall which cuts across the south-east angle of the East Lobby of the staircase (67). This wall goes with the Doric Temple, and in it we found Proto-Corinthian pottery, so that it cannot well be much later than the seventh century B.C. This means that the terrace wall which supported the Megaron fell away between the ruin of Mycenae, which may be dated to the later twelfth century, and the building of the Doric Temple, which probably occurred in the seventh century B.C.

A glance at Steffen's plan <sup>1</sup> shews that below the Megaron to the south the limestone rock of the acropolis falls away very steeply down to the Chaos ravine. The retaining wall for the Megaron terrace should have stood on the brow of this precipice. This particular section of the enceinte of the citadel is the one place where the actual line of the citadel wall can no longer be traced because the wall has fallen down the cliff. The Cyclopean wall of the citadel runs along the south-west side to a corner resting on the top of the black rocky spur which frowns over the precipitous ravine at the most southerly point of the circuit. From this corner the brow of the precipice runs northwards towards the Megaron. As indicated by Steffen, the acropolis wall must have run along its top, and must thus have reached the corner of the hill just below the Palace where the line of the rock turns eastwards below the Megaron. Between this point and the conglomerate tower which crowns a projecting rock further east, Steffen traced the line of the citadel wall along the brow of the precipice where the wild hollyhocks flourish to-day. The tower was clearly an important point, because it is mainly built of ashlar work in conglomerate. It closely resembles in style the walls by the Lion Gate, and the so-called Postern Gate, and should therefore be contemporary with them. We know that the main lines of the wall on the north from the Postern Gate, at least as far as the South House, date from L.H. III. times. It would be natural to assume that the whole circuit was built at one time and all belonged to one system, except for the north-eastern addition already mentioned (see above, p. 12). Thus we can assume that the ruined stretch of wall in

<sup>1</sup> *Karten von Mykenai*, Pl. II.



this corner below the Megaron was also of L.H. III. date. If then we restore the Cyclopean wall along the line indicated by Steffen, who had the opportunity of observing the ruins along this side before they were obscured by the earth thrown out in the excavations of the Palace above, we find that the citadel wall would have run close below the south wall of the Megaron. So close would it have run that there would not have been space between them for a separate terrace wall of the strength required to hold up the deep fill on which the south side of the Megaron rested. Thus we come to the inevitable conclusion that just as the citadel wall by the Lion Gate acts as a retaining wall to hold up the artificial terrace of fill on which the Granary is built, so here the citadel wall running along the brow of the precipice kept up the massive limestone fill on which the Megaron was built. In other words, the Megaron could not have been built till the citadel wall was built.<sup>1</sup>

The citadel wall is of L.H. III. date—its acting as a terrace for the Megaron, just as it acts as a terrace for the Granary, supports the idea that the whole circuit is of one date and early L.H. III.—thus the Megaron should also be of L.H. III. date. This conclusion coincides exactly with the dating already derived from a study of the Pillar Basement and the Court. The great wide artificial terrace created for the building of the Court with the Megaron on its east and the Room of the Throne and other apartments to the west all belong to one period of building activity. That period is the beginning of L.H. III., the very time when the Mycenaeans were busily engaged in erecting strong walls, ambitious tombs like the Treasury of Atreus, and houses with spacious chambers. This passion for terracing a site is also to be noted at Tiryns in the laying-out of the later citadel and Palace, both of which date from L.H. III. times, though somewhat later than the corresponding monuments of Mycenae.

One other point deserves consideration. The lowest course of the north wall of the Megaron consists of the living rock cut to shape, and directly below the gypsum slabs along this same wall the top of the

<sup>1</sup> This is not, in fact, quite conclusive, for there might have been a retaining wall here supporting an early Megaron, which could later have been incorporated in the acropolis wall in L.H. III. times. But in view of the other evidence connecting the Megaron with L.H. III.—and especially from its close association with the Court, Pillar Basement and Room of the Throne—it is extravagant to assume the existence of such a retaining wall, isolated as it would have been, built when there was no wall surrounding the citadel.

native rock is trimmed down to a roughly level surface. That is to say, the surface of the rock along the north wall may be taken at about 72·13. We have just seen that under the south end of the Vestibule our test reached rock at level 69·92. That is to say, in a distance of less than 12 m., the width of the Megaron, the rock falls over 2 m., or one in six, an extremely steep gradient. At the south-east corner the level of the rock is 67·65, that is, nearly 5 m. below the level of the north-east corner, an even steeper gradient. Land such as this would not have been selected by the earliest builders on the summit of the acropolis for one of the most magnificent apartments of the Palace. They would naturally have chosen the more level ground on the summit where they would not have to indulge in such extravagant terracing as was necessary here. The Megaron too, lies in a remote corner of the Palace, and from the plan of the whole looks somewhat like a later addition. The traces of earlier constructions attributed to the First Palace are to be found, as we should expect, on the more level ground under the North Corridor and adjoining parts, where the column bases built into the temple foundations shew that one of the more important halls of the later Palace also stood.

The Megaron then, and the system of which it forms part, belongs to a comparatively late stage of construction, or, in other words, to the Second Palace. Here again we find a correspondence with Tiryns where the Megaron belongs to the last Palace, and dates from L.H. III. Both Megara employ sawn conglomerate for thresholds and other important points. The use of sawn conglomerate is not found before the Third Group of Tholos Tombs,<sup>1</sup> the earliest of which falls in the beginning of L.H. III. Wherever we look, the correspondence is complete. The Palace, the walls and the tombs of Mycenae, the walls and Palace of Tiryns, all give the same results, and all can be dated to the same period, the Third Late Helladic, when after the fall of Knossos we should naturally expect the mainland of Greece to exhibit great activity and develop freely. If the First Palace at Mycenae—as seems reasonable, though we know practically nothing about it—depended largely on Cretan models, and if the Megaron, as held by Dr. Duncan Mackenzie<sup>2</sup>

<sup>1</sup> See p. 389. Sawn conglomerate and limestone are characteristic of the palace at Tiryns, which is L.H. III.; see Schliemann, *Tiryns*, pp. 264 ff.

<sup>2</sup> *B.S.A.* xiv. pp. 386 ff.; cf. Doerpfeld, *Ath. Mitt.* 1907, pp. 576 ff.; Noack, *Ovalhaus und Palast*, pp. 34 ff.

and others, is a Mycenaean and not a Minoan feature, then we can understand the late introduction of the Megaron at Mycenae and Tiryns. We also see why it was necessary to make artificial ground to build it, since the rest of the available area was already occupied by essential parts of the Palace. However, while it is almost certain that the Court and Megaron would not have been built where they are had the higher, and at the same time more level, part of the summit been available, we cannot fail to admire the genius of the architect who could, in a space so confined, and on such very unfavourable ground, boldly turn the very difficulties to advantage, and conceive and carry out the idea of erecting here on the brow of the precipice one of the finest specimens of Mycenaean architecture.

Certain general considerations all tend to the same conclusion, that the Palace with the Megaron in its present form dates from the Third Late Helladic Period. There must have been a palace for the kings who were buried in the Shaft Graves, for, as Sir Arthur Evans has already claimed, a palace is a correlative of royal tombs.<sup>1</sup> This argument applies with equal force to the kings who built the third group of tholos tombs. It is almost inconceivable that the great builders of the later tholos tombs, of the Lion Gate, of the Grave Circle, and of the Cyclopean wall, should not have built themselves a new palace. There is a new architectural epoch at the beginning of L.H. III., and a palace would naturally find a place in it. Great terracing and levelling are characteristic of L.H. III. times at Mycenae and Tiryns alike, and both are well illustrated by the Palace. It is highly improbable that a single building constructed largely of timber, crude brick and rubble masonry could have existed from the end of the seventeenth century (the end of the Middle Helladic period), when the Shaft Grave Dynasty arose, right down to the fall of Mycenae in the twelfth century. Even the Palace of Knossos, which was a very substantial building, was reconstructed and enlarged many times during its career from its first building in M.M. times down to its overthrow at the end of L.M. II. If there was a change of rulers at Mycenae from the Shaft Grave to the Tholos Tomb Dynasty, there would naturally be changes in the Palace.

Finally, it is by no means strange that the pottery evidence from the Court and Megaron is not as full as could be wished. Such evidence

<sup>1</sup> *Times Lit. Supp.*, July 15, 1920.

frequently disappears in the process of terracing and levelling, especially on the top of a steep and rocky hill. For instance, in the Grave Circle there is practically no L.H. III. pottery to be found on the east side, though fortunately on the west the supporting wall and the acropolis wall are both standing high enough to have preserved sufficient stratification on that side to prove that the whole Grave Circle is of L.H. III. date, proof which, in this case, is supplied by the pottery from the Pillar Basement.

It has been suggested that the earlier palace stood lower down the hill to the south-west, where it would have been shielded from the violent north winds that sweep round Mycenae, but of this there is as yet no evidence. We believe that the Palace always occupied the commanding site in and around the summit of the citadel.

#### THE FRESCOES FROM THE WALLS.

Tsountas<sup>1</sup> in his excavations found a quantity of burnt fragments of fresco lying on the floor of the Megaron, especially in the north-west angle. Rodenwaldt, in his re-examination of the hearth and floors in 1914,<sup>2</sup> found other pieces lying on the gypsum slabs about 3 m. west of the north-east angle, and we in 1921 found yet other pieces close to the same spot (by level 72.13<sup>3</sup>) lying face downwards, broken, but of considerable size. To lift, remove and mend them was no easy matter, for they were badly burnt and inclined to crumble. It has, however, been possible to join those fragments of which the decoration was visible so as to compose a large piece measuring  $.65 \times .33 \times .023$  m. (Pls. XLII. XLIII.). The colours have been affected by fire, which has turned the blue to green, the red to brown, producing a sobriety of effect which did not exist in the original.

The fresco represents a building of several stories, marked into narrow vertical divisions by walls of which the ends are seen in section, and with women standing either at the windows or outside. It is therefore part of the same building, or a similar one, as that on the fresco fragment discovered near by, in 1914, by Rodenwaldt.

<sup>1</sup> *Практика* 1886, p. 73; 'Еф. 'Арх. 1887, Pl. II.

<sup>2</sup> *Fries d. Megarons v. Mykenai*, pp. 23 ff.

<sup>3</sup> I.e. close to where Rodenwaldt found his new pieces of fresco, *Fries d. Megarons v. Mykenai*, p. 23.

It has some of the characteristics of the high, many-towered type of building shewn on the Zakro sealing,<sup>1</sup> others of the apparently lower and wider type seen in the fragment from the Thirteenth Magazine, Knossos,<sup>2</sup> and associated fragments. The framework is of wood, probably filled with rubble and decorated with stucco imitating stonework. Below, to the right, is part of the rock on which the castle stands—spots indicating conglomerate,<sup>3</sup> scallops, the customary finish to a conventional landscape, and faint traces of a tree. The resemblance to the silver rhyton from Mycenae,<sup>4</sup> already pointed out by Rodenwaldt in connection with his own fragments,<sup>5</sup> is particularly striking.

For convenience of description, letters have been marked at the top of the plate, indicating the vertical divisions separately. Unless otherwise stated, the wood is drawn in brown.

*Description.* Plate XLIII.

A. On the extreme left, the end of a wall of rubble or crude brick with black markings indicating wooden ties.<sup>6</sup> Two horizontal beams bordering an undecorated oblong of blue-green, and a chequer pattern of black and blue-green, the latter probably a plaster imitation of slabs of stone;<sup>7</sup> the former, and similar undecorated spaces elsewhere, may have been originally adorned with some pattern now lost, perhaps spots imitating stone as in the fresco with part of a pillar shrine from Knossos.<sup>8</sup> On the other hand, they may have been undecorated, as in the fragment from Orchomenos.<sup>9</sup>

B. Two wall ends with black markings as in A. That on the right is double. Between them, on blue-green ground, is what appears to be a pillar, tapering towards the base. Traces of the walls are found lower down, and near the left-hand wall, between it and the pillar, a brown mark, perhaps the remains of an inner wall corresponding to that on the right so that the column is *in antis* (see Reconstruction).

There are also indications of two horizontal beams; the surface between these has flaked off; that below them is first green, then shews traces of a

<sup>1</sup> *J.H.S.*, xxii. Pl. X. No. 130.

<sup>2</sup> Evans, *Palace of Minos*, i. pp. 445-6, Figs. 319, 321. Rodenwaldt also very aptly compares the fresco fragment from Orchomenos (Bulle, *Orchomenos*, i. Pl. XXVIII), *op. cit.*, p. 33.

<sup>3</sup> Rodenwaldt, *Tiryns*, pp. 26-27.

<sup>4</sup> Stais, *Ath. Mitt.*, 1915, pp. 45 ff.

<sup>5</sup> Rodenwaldt, *Fries d. Megarons*, p. 54.

<sup>6</sup> Fyfe, *J.R.I.B.A.*, x. 1903, p. 114; Bulle, *Orchomenos*, i. p. 73. The black markings on our fresco are oblong and comparatively close together.

<sup>7</sup> *B.S.A.*, x. pp. 41-42.

<sup>8</sup> Evans, *Palace of Minos*, i. pp. 445-6, Fig. 321.

<sup>9</sup> Bulle, *Orchomenos*, i. Pl. XXVIII.

chequer pattern, and finally becomes partly yellow, partly green and blue, the remains of some object now lost. On the left is the head of a woman, apparently bending, with hair of a dull brown or black.

C. On the upper section, vertical posts which do not appear to be carried down to join the horizontal beam below them (see Reconstruction).<sup>1</sup> Next, an oblong space of green, traces of a beam, and a chequer pattern, colour uncertain. Partly overlapping the chequer, partly on yellow ground, the head and bust of a woman.<sup>2</sup> The hair is red-brown, the face and body white: she wears a jacket with sleeves and a necklace. The details have flaked off as well as the actual surface below the woman; the latter reveals a ground of blue and yellow, perhaps part of an earlier picture underlying ours, perhaps merely the result of a correction.<sup>3</sup> The colour of the woman's hair is curious.<sup>4</sup> It cannot have been originally black, now burnt red, because the black paint on other parts of this drawing has survived the fire.

This part of the structure is finished off on the right by a wall end which is carried down at least as far as the woman's head. At its upper end is a black mark indicating a cross tie; presumably there were others, now lost. Exactly where the wall ended below is uncertain.

D. A space enclosed by the wall ends bordering C and E. There are indications of a beam crossing it at right angles near the top; the ground is greenish, changing to ochre-yellow near the bottom.

E. Two wall ends both shewing traces of black marks indicating wooden ties. The black marks on the left are not carried to the edge of the wall, either because rubbed off, or because the corners of the wall were covered. The former alternative is the more probable. It is not certain how far down the walls are carried.

The wall ends frame an area crossed by three wooden beams. In the uppermost section was, apparently, a frame or wooden support; the second shews traces of a pattern that cannot be distinguished; in the third the ground has

<sup>1</sup> They may resemble the wooden construction on the upper part of a fragment from Knossos, *J.H.S.*, 1901, p. 136, Fig. 18.

<sup>2</sup> The motive of women looking from windows has an interesting history. It develops from illustrations like the Knossos miniature fresco of women seated in a loggia watching some function (*J.H.S.*, 1901, Pl. V., *J.R.I.B.A.*, xviii. p. 290, Fig. 1). In the next stage, that of the Mycenae miniature fresco found by Schliemann under the Ramp House (*Ath. Mitt.*, 1911, Pl. IX; *B.S.A.*, xxiv. pp. 189 ff.), the windows reveal only the heads, arms and shoulders of the spectators. In the fragment of the Megaron fresco found by Rodenwaldt (*Fries d. Megarons*, p. 30, coloured plate) is a window framing the head alone. This bears a striking resemblance to a type in Phoenician art, of a woman's head in a window. Examples are given by Poulsen (*Orient u. d. frühgriechische Kunst*, p. 144; *Jahrbuch*, 1911, p. 232), who suggests a connection with the Knossos miniature fresco on the one hand and the framed women's heads on Melian vases on the other. The discovery of the new parts of the Megaron fresco strengthens the theory that the Phoenician type is derived from the Mycenaean, perhaps by way of Cyprus.

<sup>3</sup> It may be explained by the process described, *Ath. Mitt.* 1913, pp. 187-8.

<sup>4</sup> Rodenwaldt, *Fries d. Megarons*, p. 69, note 154 (10).

flaked off; the fourth is ornamented with a chequer pattern, black-and-white and blue-and-white, finished by a black line. Ground blue above; below, ochre-yellow.

F. Traces of a pillar tapering downwards, on blue ground. Below, a stripe of white, scarcely distinguishable, indicating a stone coping, and traces of a beam, finished by a line of black. Lower down, on very discoloured blue-green ground, what may be remains of a chequer pattern; below this the ground becomes yellow.

G. Here the surface is so poor that it is possible only to distinguish a horizontal beam, possibly with another immediately above it.

H. Between wall ends, with black cross markings, a white stripe, indicating, perhaps, a stone sill or coping, and outlined above with a black line. From it rises a straight post or pillar or possibly two posts side by side (see Reconstruction, where the one on the left shews more clearly). Immediately below is a wooden beam, and a plaster chequer pattern, colour uncertain. The chequers are on a larger scale than those in other parts of the drawing.<sup>1</sup>

Lower down there are no traces of architecture, but a patch of green suggestive of a tree (cf. the silver rhyton from Mycenae),<sup>2</sup> and scallops<sup>3</sup> of the type usually found in landscape; also an irregular mass, black, with white and yellow markings, representing the rock on which the castle stands.

At the bottom of the fragment are remains of the stripe which originally bordered the picture. Judging from all analogies, this must have been white, though it now shews only the blue under-surface.

### *Reconstruction.* Pl. XLII.

In the reconstruction, the wooden beams and plaster chequer pattern have been completed. Dotted lines are used for the less distinct or more conjectural parts of the fresco. The horizontal hatchings indicate brown, the vertical hatchings blue-green.

In B an extra anta, making an inner frame, has been supplied between the left-hand wall end and the pillar. Of this, the brown mark mentioned on p. 250 was presumably part. Its existence is necessary in order that the pillar may come in the centre of the space. This makes the opening in which the pillar stands 0.45 m. wide; the opening in the fragment of the same fresco published by Rodenwaldt is 0.43 m. wide. The right-hand wall end is 0.13 m. wide at the top, and 0.07 m. wide when it reappears

<sup>1</sup> This suggests that the fragment of chequer pattern, illustrated by Rodenwaldt, *Fries des Megarons*, p. 35, Fig. 17, may after all come from this fresco.

<sup>2</sup> *Ath. Mitt.*, 1915, pp. 45 ff.

<sup>3</sup> Rodenwaldt, *op. cit.*, p. 22, suggests that the fragments with scale or scallop pattern found by Tsountas in the Megaron came from the frieze; this is still more probable in view of the scallop described above,

lower down. This cannot be due to irregularity of drawing: the conclusion is that what we have is two adjacent wall ends in the upper part and in the lower one only. The capital of the pillar is copied from that on Rodenwaldt's fragment.<sup>1</sup>

In C and E the number of posts in the upper section is uncertain. The black marks have been carried in the drawing right across the post on the left of E, as this is more probable than the other alternative described on p. 251.

In H a faint black line can be distinguished below the chequers and has been emphasised in the reconstruction. Following Rodenwaldt's fragment, the chequers have been drawn white above, blue below.

The lower extremity of the architecture is uncertain. As the ground on which the building stands is shewn in the right-hand corner, G and H must belong to the lower stories of the building. The proximity of the border below the picture suggests that the same is true of sections A to F, though the ground may have dropped slightly on this side. It seems highly probable that the ochre ground in D and E marks the beginning of the landscape and the end of the architecture; similarly that the women in B and C are standing before the castle, not inside. Two different methods of arranging the junction of a building with the ground are shewn by the fragment of a steatite vessel from Knossos,<sup>2</sup> and the silver rhyton from Mycenae.<sup>3</sup> *A priori*, we should expect the fresco to be of the latter type; while such traces as the fresco preserves—the straight line bordering the chequer pattern in E and H, and the fact that the walls in C, possibly also in E, appear to be carried below the rest of the architecture—suggest a resemblance with the former.

#### *Relation to other Fragments.*

It has been known since Tsountas' excavations in 1886 that the Megaron at Mycenae was decorated with a frieze representing battle-scenes.<sup>4</sup> That the battle-scenes included a besieged castle was discovered during the German investigations in 1914, when some important new fragments came to light.<sup>5</sup> These were published by Rodenwaldt, together

<sup>1</sup> Rodenwaldt, *op. cit.*, coloured plate.

<sup>2</sup> *Ath. Mitt.*, 1915, pp. 45 ff.

<sup>3</sup> Fighting before the walls of a besieged castle is in accordance with Homeric practice as described in the *Iliad*. There, the Trojan army is camped before the walls of Ilion, which we know from the excavations of Schliemann and Doerpfeld to have more nearly

<sup>4</sup> *B.S.A.*, ix, p. 129, Fig. 85.

<sup>5</sup> 'Εφ. 'Αρχ., 1887, Pl. XI.



with remarks on the reconstruction and arrangement of the whole frieze.<sup>1</sup>

Rodenwaldt's architectural fragments and ours are presumably from the same building. Ours appear to be on a slightly larger scale, but this is partly due to loss of detail, especially in the case of some of the vertical wooden frames that would narrow the intervening spaces; partly to the fact that Mycenaean artists never aimed at exact symmetry. The height of the left-hand pillar on section B<sup>2</sup> would, if complete, be the same as that of the pillar on his. The most notable differences between the two series of fragments are, that Rodenwaldt's fragments shew more architectural detail, *e. g.* the superposed cross-beams and round beam-heads, but fewer oblong spaces, which are frequent in ours. This may be due to their better preservation, but more probably to the fact that they illustrate the upper storeys of the building, and ours the lower.

When considering the relative positions of Rodenwaldt's fragments and ours, there is a certain difficulty, for the women who are presumably watching the fight should face outwards. This would suggest that our fragments be placed on the left. On the other hand, so much space on the right of the picture is devoted to landscape as to produce a strong impression that the building ended here; in this case, our fragments (if part of the same building as that in Rodenwaldt's) should be placed on the right. Unfortunately, the pieces do not appear to join. They must have been found very close to each other by the north wall, but we cannot tell the exact relation to each other in which they had been lying.

#### *Date.*

The Megaron frieze cannot be Late Helladic I., as has hitherto been supposed,<sup>3</sup> since archaeological evidence indicates that the Megaron should be placed in Late Helladic III.

resembled a castle than a fortified city (cf. Durm, *Zum Kampf um Troja* (1890), Pl. I.). Here we have a frieze with the besieged castle at one end of the wall, the armies fighting before it, and the camp of the besieging army beyond. It may well be considered as illustrating a siege like the siege of Troy.

<sup>1</sup> Rodenwaldt, *Fries d. Megarons*; see also *Ath. Mitt.*, 1911, p. 232. In addition to the fragments described, the following should be added to Rodenwaldt's list: (a)  $\cdot 055 \times \cdot 03$  m. Part of neck and mane of horse, joining Rodenwaldt's No. 15 of the Megaron frieze. At Athens. (b)  $\cdot 055 \times \cdot 06$  m. Pl. XXVI. c. Boar's tusk helmet finished above with ring. The helmet is yellowish-white, the ring white, the background bluish-black. At Athens.

<sup>2</sup> See p. 250.

<sup>3</sup> Rodenwaldt, *op. cit.*, p. 55; *Ath. Mitt.*, 1911, p. 248.

The arguments for putting it early were as follows :—

(i) The Composition; the free arrangement of figures above each other without reference to ground line, particularly noticeable in that part of the frieze which represents arming and fighting scenes. This convention was common in Crete in L.M. I.<sup>1</sup> and II., and in Greece in L.H. I., but it appears to be extinct by the later half of L.H. III. (= later half of L.M. III.), for it is not found in the Second Palace at Tiryns.

(ii) The absence of black contours for the figures; the symmetrical arrangement of the dentil pattern on the framing borders; the alternation of blue and yellow background;<sup>2</sup> the ochre tone of the yellow.<sup>3</sup> These are points which it has in common with the frescoes from the First Palace at Tiryns, but not with those from the Second, which dates from about the middle of L.H. III.

So far the evidence is against the frescoes belonging to the second half of L.H. III. This leaves a wide margin, *i.e.* L.H. I. to the first half of L.H. III.

Rodenwaldt's other argument for an early date is: (iii) the resemblance in style of the Megaron fresco to those from the First Palace at Tiryns,<sup>4</sup> which he assigns to Late Helladic I. But whereas the resemblance is undeniable, the date of the First Palace at Tiryns is uncertain.<sup>5</sup>

Moreover, it must not be forgotten that the frescoes were on the walls when the Palace was destroyed, presumably not before the twelfth century B.C., and it is highly improbable that they should have remained in that position for more than a couple of hundred years at the most; had they been painted in L.H. I., they would have been there for four hundred.

Any conclusion as to their date must in any case be subordinate to the decision concerning the date of the Palace. There is no justification for using the frescoes as an argument for assigning an early date to the Megaron.

<sup>1</sup> See *Ath. Mitt.*, 1911, pp. 246, 247.

<sup>2</sup> Rodenwaldt, *Tiryns*, ii. p. 185.

<sup>3</sup> *Ath. Mitt.*, 1911, p. 248.

<sup>4</sup> Rodenwaldt, *Tiryns*, ii. p. 185. In *Fries d. Megarons*, pp. 54–55, he speaks of the connection between the style of the fresco and of objects from the Shaft Graves, *i.e.*, the dagger with the lion hunt and the fragments of silver vessels. Though they have many motives in common, the resemblance in style is not sufficient to affect the date of the fresco.

<sup>5</sup> That is to say, it is earlier than L.H. III., but its position in L.H. I. or L.H. II. cannot yet be defined. And in spite of the resemblance our frescoes are later in style.

## THE LIGHTING OF THE MEGARON.

Before leaving the Megaron there is one more point to consider, how was it lighted? So far as we can see there were no windows between it and the Vestibule, so that from the west the only direct light obtained would have come in through the door. There may have been windows in the east or south walls, the latter of which would, of course, have given a magnificent view down the precipitous Chaos ravine and over the Argive plain beyond.

It has usually been assumed that on the four column bases round the hearth there stood four tall columns, the tops of which projected above the main part of the roof, and so formed a kind of clerestory for the admission of light and the emission of smoke. The column bases have the same diameter as those of the Porch, .57 m., and therefore should have carried columns of the same height, that is, not more than 3 m. high according to the Knossian analogies.<sup>1</sup> The Megaron, however, is not a Cretan feature, and we might therefore imagine that these bases carried the tall columns suggested, for which we have analogies in the engaged columns of the Treasury of Atreus and the Tomb of Clytemnestra. But a clerestory, such as that usually assumed here, would have prevented the construction of any other storey above. Put briefly, the problem is this. The Megaron at Mycenae either had two storeys, as we have assumed for the Porch and Vestibule, or it had only one. In the first case the ground-floor room, Megaron proper, must have been lit either by such light as came in through the doorway, or else by windows in the east or south walls.

A fire on the central hearth does not demand, although it suggests a hole in the roof. If we assume that the Megaron was lit by a hole in the roof, thus deriving its lighting from the upper floor, exactly the same problem arises for the upper room. How was that lit? This merely shelves the difficulty. We may thus take it that if the Megaron had two storeys the ground floor was most probably lit by windows in its east or south wall. Such windows looking out over the citadel wall would have formed an excellent vantage point from which some Rahab could let down spies.

If, on the other hand, there was only one storey this would pre-

<sup>1</sup> See above, p. 211.

sumably have been as high as the two storeys of the Porch and Vestibule together. We should then have had in the Megaron a large room going right up to the roof with what was practically a gallery (over the Porch and Vestibule) on its west side, and with the rafters visible, as suggested by Odysseus' house. In this case the lighting must have been by windows, a hole in the roof or a clerestory, preferably the former, as they let in less rain and more light. The column bases of course suggest columns only as high as those of the porch; in other words their evidence, so far as it goes, is in favour of two storeys. It is hardly likely that they carried open timber rafters from wall to wall while the Megaron went right up to the roof, although Homer's account of Odysseus' house might be held to support this solution. At any rate, till we know more about the upper structure of the Megaron it would be fruitless to discuss further the problem of its roofing and lighting.

#### 15. ANTE-CHAMBER TO DOMESTIC QUARTERS.

At the north end of the Porch of the Megaron lies a threshold of sawn conglomerate,<sup>1</sup> which has two pivot-holes, one at each end, for a double door. Immediately behind it the rock rises sharply to the north, and some 3 m. due north of the threshold we find a cement pavement laid on a thin stratum of earth above the rock (34). This pavement is at a height of 73·65, whereas the threshold lies at 72·22. The sloping rock surface between the two points shews obvious traces of having been cut down. Just within the north-east corner of the threshold we found the carbonised remains of a wooden post, either of pine or cypress, and traces of a similar post against the north-west angle. These two posts probably supported a short staircase laid against the sloping surface of the rock to give access to the cement floor or landing just noted. This landing is shut off to the north by a rubble wall, which supported a higher terrace of the Palace and carries a cement floor at a level of 76·15. Turning eastwards from the landing (34) we pass through a short narrow corridor which gradually slopes up from west to east like the North and South Corridors, till we reach a level of 73·92, when the narrow passage widens out into an Ante-Chamber (33) some 6 m. long by 3·50 m. wide. Against the west wall of this room is a bench of stone, about ·55 m. wide

<sup>1</sup> See p. 207, above.

and .33 m. high, covered with four or five layers of white stucco. This seems to have run along the north wall also, but is there much damaged. In the middle of the south wall is a similar bench about .48 m. deep, .25 m. high, and 1.90 m. long, and also covered with four or five coats of white stucco. It is interesting to observe that this second bench was originally 1.50 m. long and had rounded ends, of which the western was afterwards lengthened, and made rectangular.

This Ante-Chamber, like the landing before it, is bounded on the north by a rubble wall which holds up a higher terrace of the Palace to the north (23) where there are remains of a cement floor at level 76.25. To the east the Ante-Chamber is bounded by a short wall which separates it from the basement (32), while to the north of the short wall the cement pavement stops abruptly against the unpaved area of 31.

Tsountas in his excavations found here large pieces of the wall decoration lying face downwards on the ground.<sup>1</sup> There are four main groups of fragments :

1.	Nat. Mus. Athens	2786, .85 × .62 m.
2.	„ „	2787, .52 × .39 m.
3.	„ „	2788, .55 × .17 m.
4.	„ „	2789, .39 × .31 m.

They have been affected by fire, though not to any great extent. The fire is probably responsible for the grey-green colour, otherwise unusual; cf. the case of the grey-green on the frieze from the Megaron.

These fragments are unparalleled. Rodenwaldt's suggestion that they come from representations of hanging rugs is the most convincing hitherto offered. The narrow zones of colour decorated with conventional patterns, argonauts and others, are divided by stripes and finished at the bottom with what appears to be a rounded piece of wood like that used for hanging objects to weight them when hanging, or to roll them on when not in use. They are crossed by diagonal lines which may represent the strings supporting the rugs. Down the centre runs a stripe marked with crosses, perhaps cross-stitching joining two narrow lengths.

With regard to the patterns Rodenwaldt remarks on their suitability for embroidery. But what is most striking, though irrelevant

<sup>1</sup> 'Εφ. 'Αρχ., 1887, Pl. XII; Rodenwaldt, *Tiryns*, ii, p. 232.

except for dating purposes, is their resemblance to the decoration of L.H. III. stirrup vases. This is especially noticeable in the case of the conventionalised flowers on the grey-green ground, and the triangles on the red ground.<sup>1</sup> The argonaut also is especially common in L.H. III. glass-paste ornaments.

Of the remaining patterns the wavy red lines on the red ground are more suggestive of imitation stone-work than of embroidery.<sup>2</sup> The pattern with the irregularly arranged wavy lines on the red ground, and that with horizontally arranged lines on the green ground, though usual motives for imitation stone-work, would also be suitable for embroidery.

In this chamber Tsountas found three beads of gold and several of glass paste and stone.<sup>3</sup>

We made a small test below the floor of the Ante-Chamber and found the following pottery:—

Middle Helladic, Minyan ware, grey, eight sherds.

Matt-painted, Group B. I., ten sherds.

Group B. II., three sherds.

Group D. I., light-on-dark, one piece.

Plain and polished ware, a good deal, some probably L.H. I—II. One piece is mended with a lead rivet, and there is part of a spit support (?) like that from the first layer below the Vestibule of the Megaron.

Late Helladic I., three sherds.

Late Helladic II., handleless cups, twenty-seven.

Late Helladic III., painted sherds, about five; kylikes, mostly unpainted, seven pieces.

The M.H. ware here was found low down close to the rock which lies 1 m. below the level of the floor. Most of the other pottery was in a stratum of black earth which went 35 m. below the floor, and lay above a fill of rough limestone. Here again the ceramic evidence indicates that the Palace took its present form in L.H. III. We also found a number of fragments of plain red stucco in this chamber. The unpaved space, which is shut off from the small basement (32) by a wall, seems, to judge by the fragments of treads of soft sandstone lying here, to have been a short staircase<sup>4</sup> to give

<sup>1</sup> Cf. Furtwängler-Loeschcke, *Myk. Vasen*, Pl. XXX.

<sup>2</sup> Cf. *B.S.A.*, xxiv. Pl. X. 27.

<sup>3</sup> *Πρακτικά*, 1886, p. 70. One of the gold beads is perhaps 'Εφ. 'Αρχ., 1887, Pl. XIII., No. 26, Athens, Nat. Mus. 2501. The others cannot be identified.

<sup>4</sup> This is also Tsountas' opinion, *Πρακτικά*, 1886, p. 70.

access from this low level to the terrace to the north (23, 25), to the upper storey of the buildings further east (30), and perhaps even to the rooms lying above the Megaron itself. If this were a staircase as suggested, the small basement (32) lying between it and the Megaron would then have been below either a landing approached by the staircase or perhaps an upper flight. The latter was hardly needed here to reach the higher level to the north; but there may have been an upper hall over the Ante-Chamber (33). For if square landings are put at the ends of the two flights of the suggested staircase the resulting total height would be about 3 m. This gives sufficient headroom for the Ante-Chamber itself and height enough to reach such an upper hall.

In the Basement (32) Tsountas found a double axe and a handleless pot, both of bronze.<sup>1</sup> We dug below its earthen floor down to the rock, which was only .55 m. below. At .35 m. under the floor was a layer of black earth similar to that below the cement floor in the Ante-Chamber. The pottery found was as follows:—

Early Helladic, one sherd.

Middle Helladic, Matt-painted, Group B. I., three sherds.

Plain and polished, three sherds.

Late Helladic I.—II., six sherds.

Handleless cups, eight fragments.

Late Helladic III., five sherds.

In addition there were twelve other sherds of L. H. ware which could not be placed more precisely.

The south wall of this basement and of the Ante-Chamber is of rubble masonry, and shews clearly the gap where a horizontal wooden beam was once inserted. This was the lowest part of a wooden frame which, like that in the South House, stood above the masonry base of the wall to strengthen the superstructure of crude brick, of which many fragments now baked hard by the fire that destroyed the Palace lie on the top of the south wall of the Basement. This wall is not parallel to that of the Megaron, but is in the same straight line as the earlier wall behind the north wall of the Court, which we have already decided must belong to the First Palace. This view is confirmed by an examination of the case here. A double wall of this thickness was not necessary, and is quite unusual in Mycenaean architecture. The double wall was only

<sup>1</sup> *Πρακτικά*, 1886, p. 70.

necessitated by the addition of the Megaron to some of the structures of the First Palace which were incorporated in the Second. It is also remarkable that this wall does not go beyond the basement, whereas the north wall of the Megaron runs nearly 6 m. further east. Beyond the Basement there are two other rooms which look like additions tacked on after the building of the Megaron, since they both rest against its north-east angle.

We thus have here once again unmistakable signs that there are two stages in the Palace, the First, built we do not exactly know when, and a Second built at the beginning of L.H. III. That L.H. III. pottery should be found below the floors of this Ante-Chamber (33) and the Basement (32) shews that the final alterations here were made in L.H. III. times. We have already, in discussing the South Corridor, put forward the suggestion that it originally ran right through at a level of 75.50 so as to give access to the higher level which lies immediately to the north of this Ante-Chamber, which is about 76.00. Later, perhaps after the fire which damaged the north wall of the Court, it was decided to cut short the South Corridor (by figure 35), and so the threshold was sawn through and most of it removed. Then the Ante-Chamber (33) with its approach (34), and the Basement and staircase (31, 32) by it were constructed and a door to it was broken through the north wall of the Porch of the Megaron. The south wall, like its westward extension now below the South Corridor, is probably a terrace wall of an earlier palace. We can now suggest on the evidence before us (cf. pp. 195 ff., 207) that this alteration was carried out about the middle of the L.H. III. period or perhaps even later, in advanced L.H. III. times, and the presence of L.H. III. pottery below these floors in no way conflicts with this explanation of the sawn threshold and the cutting short of the South Corridor, which Tsountas<sup>1</sup> rightly suggested must have been designed to give direct access from the Western Portal to the Domestic Quarters of the Palace.

### ROOM 30.

The Basement is entered by a small door—at least the east wall is not continuous—from another small room to the east (30). This had a floor of whitish-yellow clay, and possibly had a stone bench some .60 m.

<sup>1</sup> *Πρακτικά*, 1886, p. 70.



wide along its north wall, and another perhaps along its east wall. These benches, however, are very problematical, and may be only extra foundations for the walls. The level of the clay floor 73·68 shews that this room formed part of the same system as the Basement (32) and Ante-Chamber (33) just described. Perhaps another reason for cutting out the Ante-Chamber was to enable the builders to attach these additional rooms at the same level further east. Below the floor of this room we found a quantity of pottery, mostly of L.H. III. date, and on the uneven surface of the rock a little M.H. pottery. The details are these :—

Middle Helladic, Matt-painted, Group B. I., nine sherds.

Group B. II., one sherd.

Plain and polished ware, a little.

Late Helladic II. (?), handleless cups, not more than six pieces.

Late Helladic III., painted, about thirty-eight sherds, and twenty-seven fragments of kylikes mostly unpainted.

There was also a great quantity of unpainted L. H. ware, and the broken handle of a bowl of white marble.

### Room 29.

Beyond this room to the east lies yet another even smaller (29). This has remarkably thick walls for its small size. It is only 1·50 m. wide and not more than 5 m. long, while the walls are ·75 m. to 1·00 m. thick. In the outside of its north-west angle there is an ashlar block of poros with a dowel-hole in its upper surface. This block may be re-used like those in the drain, or may have been the base of a pier to strengthen the angle of this room. The floor was cemented and many fragments of plain red and blue stucco were found in it, with a good deal of pottery as follows :—

Early Helladic, one sherd.

Middle Helladic, one sherd.

Late Helladic II (?), handleless cups, two pieces.

Late Helladic III., much painted and a very considerable amount of unpainted ware.

The purpose of this room is obscure owing to its small size. Dr. Holland suggests with some probability that it served as a cistern or tank, the thick walls being specially designed to resist the pressure of the

water. This would explain as well its cement floor and the traces of cement on the walls. The corners, however, are not rounded.

#### 16. THE RED BATH.

The Staircase (31) <sup>1</sup> which led up to the high terrace to the north from the Ante-Chamber (33) was presumably the main line of communication between the Megaron and adjoining region, and the whole of the north-eastern part of the Palace, where, following Tsountas, we place the Domestic Quarters. Unfortunately, previous excavations have cleared the space (25) directly to the north down to the rock, though fortunately the remains of cement flooring further west (23, 24) give us an idea of the level (76.20 approximately) of this part, which would have been slightly lower than the east end of the North Corridor, the highest point of which is 76.67. Thus we must imagine this part (23, 24, 25) to have formed a kind of intermediate terrace midway between the Ante-Chamber (33) and the highest level of the Palace, which would have been approached by the east end of the North Corridor.

The whole Palace was thus clearly built up on the sloping rock in a series of terraces. Towards the summit we see that these terraces are small and rather uneven. Lower down on the south side where the Court is we have one large artificial terrace. We have shewn that this is of later construction and that the First Palace was on the summit. We thus get a glimpse of the advance towards unity of design made by the builders of the Palaces. The First is laid out as the ground allowed; in the Second more drastic measures were undertaken to suit the ground to the plans of the architect. The accuracy of measurement displayed by the Court, the Megaron and adjoining apartments is most remarkable and betrays a high degree of architectural skill.

To the north-east of the Staircase (31), the southern part of the intervening space adjoining it to the north (26) has been dug out to the rock in previous excavations, so here too, like the part further west (25), it is now impossible to attempt even to recover the plan of the Palace. Just on the north edge of this space (26) a curious stepped construction covered over with red stucco has been discovered (Pl. XXXVI. *a*). On the west we have the remains of three steps which seem to have been,

<sup>1</sup> See pp. 259 ff., above.

so far as we can judge, about .50 m. deep and .23-.34 m. high. On the north there is one step running along the base of a wall covered with red stucco, like the steps and the flat rectangular space they enclose. At the east end of the wall a stone-built drain runs down through the wall from north to south. This is the continuation of a cement drain (27) which lies along the north side of the wall and vanishes into a kind of trap, whence it emerges on the south side as the stone-built drain referred to. Its width and alignment correspond well with the wall on the east of Room 30, which may therefore have been the southern limit of the area in question. It is not certain what this stepped space may have been. It resembles very much the tank baths or lustral areas at Knossos, and taking into consideration the drain that runs by it we have suggested that this also may be one or the other. If we take it as a bath, it is noteworthy that it lies away to the left of one entering the Megaron in a very similar position to that of the bathroom at Tiryns.

To the north-east (28) we found some fragmentary walls, and by them a deposit of soft black earth containing a great quantity of pottery, oyster and other shells, broken animal-bones, and other household refuse. There was practically no painted pottery except part of an alabastron of late L.H. II. or early L.H. III., and two other sherds of approximately the same date. The coarse ware, which was plentiful, included pieces of three-legged cooking-pots, tall narrow-mouthed jars like Pl. VI. *a*, and parts of tiles with one broad edge for standing tapering to the opposite edge and with a hole through the centre, which may be spit-rests.<sup>1</sup> The finer pottery comprised a great number of fragments of kylikes or of goblets of a shape intermediate between the Yellow Minyan goblet and the L.H. III. kylix. There were many handleless cups, shallow bowls with horizontal handles, and many pieces of rims of vases with a metallic profile like Blegen's L.H. II. class at Korakou (*Korakou*, Fig. 82).

This deposit, which lies on the rock on the east side of the broken walls (28), was not entirely dug, as it seemed advisable to leave part of it for future reference if necessary. It agrees in composition very closely with the similar deposits already noticed below the floors of the Pillar Basement and of the room north of the West Portal, and like them its general character is late L.H. II. or early L.H. III. The finding of these three deposits below floors or on the rock as here, by the foundations of

<sup>1</sup> See p. 239.

walls seems to indicate that the Palace was rebuilt or at least largely remodelled at that time. This would agree with the suggestions already made, that there was a First Palace which lasted till the end of L.H. II. and a Second Palace, the one the ruins of which we have just surveyed, built at the beginning of L.H. III. To the east of this on the rocky slope which runs down to the north-east angle of the citadel there are no further remains which can connect with the Palace. All walls here have long since vanished and the nakedness of the living rock is very scantily concealed with soil.

There was no doubt yet another entrance to the Palace from this side, leading down towards the North or Postern Gate. We can hardly imagine that, when we have already two entrances, one to the south and one to the north-west, there should have been no means of approaching the Palace from the east, especially as the north-east part of the citadel, with its many remains of L.H. III. houses,<sup>1</sup> is so much separated from the rest by the steep summit of the rock which the Palace crowned. We assume then that there was somewhere on this east side a third entrance to the Palace, of which all definite traces are now lost.

North-west of the Red Bath, between it and the range of chambers lying on the north side of the North Corridor (11, 12, 13, 14), is the highest point of the acropolis, which here reaches a level of 78.00. The only signs of any kind of building now left here are two dressed blocks of conglomerate, marked by Steffen as 'antike Bausteine.'<sup>2</sup> They are no longer *in situ*, but are so large that one can hardly imagine that they have been transported here in later times merely for amusement. The builders of the Doric Temple did not cut and use conglomerate, it was too hard and heavy. If they found conglomerate blocks among the ruins of the Palace lying conveniently to hand, they incorporated them in their foundations,<sup>3</sup> but they would not have gone to the trouble of bringing conglomerate any distance. We can thus take these two blocks as all that is left of that part of the Palace that stood here. The old theory, put forward in the days when it was held that the men and women had separate quarters or *megara* in Mycenaean Palaces,<sup>4</sup> was that the men

<sup>1</sup> Including the interesting house with a colonnaded court, dug by Tsountas but still unpublished. We had hoped to re-examine this area as well.

<sup>2</sup> *Karten v. Mykenai*, Pl. II.

<sup>3</sup> See above, p. 231.

<sup>4</sup> See the early accounts of the Palace at Tiryns, quoted by Frazer in his commentary on Pausanias, Vol. III. p. 230. Cf. Tsountas, *Πρακτικά*, 1886, p. 71.

at Mycenae had the Court and Megaron which we have described on the sheltered terrace to the south. Here, protected by the summit of the acropolis and the higher parts of the Palace from the cold winds that sweep Mycenae in winter, the men might bask in the sun, or in the summer obtain the full benefit of the cool breezes blowing up from the Gulf of Nauplia. The women on this theory were relegated, as being the weaker sex, to a women's megaron lying on the summit of the hill to the north, exposed to the icy winds from Kyllene in winter, and shut off from the cooling sea breeze in summer. This view must be abandoned, and we suggest below where we conjecture the different quarters of the Palace to have been. On the summit, where we now see nothing but rock covered with a sparse vegetation, once stood an important section of the Palace. To-day this rock, in spite of its thin soil, is at the due seasons so gay with flowers, such as cyclamen in autumn and scarlet anemones in spring, that it has been nicknamed 'Clytemnestra's Rock Garden.'

#### 17. SUMMARY.

From this survey of the ruins of the Palace as they exist to-day and from the evidence provided by the pottery and other objects found among them, we see that, though the Palace seems to possess a carefully thought out plan, its actual development is not so clear.

#### THE PLAN.

The two entrances, the Propylon at the north-west angle, and the Grand Staircase on the south (leaving out the highly probable, but conjectural east entrance), both lead directly to the Court and the apartments adjoining it.<sup>1</sup> The broad passage that runs from the Propylon through the Western Portal into the Palace leads almost directly into the Court, where on one side we find the Megaron, and on the other the Room of the Throne. These apartments (the Grand Staircase, in its present form at least, was probably built later so as to give independent access to them from outside) seem from their plan, from the care taken in constructing them, and from their decoration, to have formed the public part of the

<sup>1</sup> The north-west Propylon was perhaps the original entrance, while the Grand Staircase seems from our examination of it, and of the Pillar Basement, to have been an addition made in almost the latest phase of the building, though it may have replaced an earlier staircase.

Palace. These would have been the official reception rooms where the ruler of Mycenae would have sat in state to give audience to his people, to envoys and to other distinguished visitors. The terrace on which these stand is artificial, partly cut out of and partly built up against the sloping hillside. From its plan alone it appears, when contrasted with the rest of the Palace, to be a later addition, and the stratification supports this view. Possibly after the fall of Knossos about 1400 B.C., when Mycenae became the great centre of dominion and wealth in the Aegaeon area and her rulers constructed the Palace, this range of state apartments was added to meet the need for increased accommodation which the greater business of the realm demanded.

The north-east part of the Palace, that most remote from either of the two entrances known, was probably occupied by the Domestic Quarters, which no doubt also ran over storerooms along the South and North Corridors. These two Corridors with two series of store and other rooms could be entered immediately from the Western Portal, and below both traces of earlier building are to be found. The Domestic Quarters may also have been approached by the suggested eastern entrance. This scheme of a Court and two long sloping Corridors was specially designed to give easy access to all parts of the Palace as quickly as possible. The two Corridors have the same orientation as the Court system and therefore they are all part of one homogeneous plan. The remains of earlier walls below the two Corridors indicate, however, that this was not the original plan of the Palace. There was, before the lay-out of the existing plan, an earlier Palace designed on less broad and convenient lines. The First Palace was adapted to the slopes of the rock; for the Second Palace the hill was terraced to suit the plan desired.

In contrast to the Tiryns Palace, which seems cramped and ill-designed, the Mycenae Palace is laid out on broad, harmonious lines. The wide outlook and comprehensive scheme of which we have the skeleton before us in the arrangement of the Court, the two Corridors and the two entrances, is worthy of the Mycenaean architects, who, to judge from their other achievements in laying out the Lion Gate, the Grave Circle, and the Cyclopean walls of the citadel, were bold and imaginative designers. They, unlike the builders of Tiryns, did not allow their plans to be hampered by narrow spaces, they compelled the rock of Mycenae to adapt itself to their needs. The Palace of Mycenae, like that of Knossos,

thus falls, if our suggestions are right, into two well-defined sections, an official and a domestic quarter. Mycenae in this, as in so much else, is the heir of Crete.

#### THE DATE.

The Lion Gate, the Grave Circle and the whole scheme of the Cyclopean enceinte of the citadel with most of the buildings within it, and also the Third Group of Tholos Tombs, all date from the beginning of the Third Late Helladic Period. The Shaft Graves, on the other hand, date from the end of the Middle Helladic Age, and do not quite reach the end of Late Helladic I. We have thus two marked periods in the history of Mycenae after it had attained a position of importance. We have attempted to differentiate these periods by calling the dynasty which ruled during the first, the Shaft Grave Dynasty, and the dynasty which ruled during the second, the Tholos Tomb Dynasty. As these two periods are clearly expressed in the other monuments of Mycenae we should naturally expect to find them reflected in the Palace also.

The Megaron with the adjoining parts, the Court, the Room of the Throne, Pillar Basement and Grand Staircase, is certainly of L.H. III. date. All indications point to this conclusion. The Megaron rested on a terrace which was retained by the citadel wall. The Court is supported at its south-west angle by the east wall of the Pillar Basement, which, from the pottery below its floor, dates from the beginning of L.H. III. The Staircase, from the evidence of the Pillar Basement and of the deeper levels of the Pithos Area, is, in its present form at least, an L.H. III. addition to the original plan. The Court and the apartments to east and west of it belong to one homogeneous design, and should therefore be contemporary. The dating of one part dates the whole, and there is ample evidence that this ambitious laying out of state rooms on a wide, artificial terrace was carried out in the heyday of Mycenae at the beginning of L.H. III., about 1400 B.C. This Palace was the home of the later kings of the Tholos Tomb Dynasty. The Shaft Grave Dynasty must have had a palace. We have recognised traces of earlier building below the floor of the existing Palace, especially in the North and South Corridors and Domestic Quarters, and have assigned them to a First Palace, which we can now attribute to the kings of the Shaft Grave Dynasty.

As far as pottery alone is concerned, certain portions of the Second

Palace, such as the Court, the Throne Room, the two Corridors, Shrine and Propylon, might be Late Helladic II.; but the Megaron and Pillar Basement are L.H. III., and the Court and the Room of the Throne are too closely connected with them to be of different date. The South Corridor shews two stages and has earlier walls below it. If we assigned all the remains of the First Palace to L.H. II. we should deprive the Shaft Grave Dynasty of a home, and the L.H. I. pottery found here indicates that there was then a palace of some kind on the summit of the acropolis.

In view, therefore, of all the evidence, we can give all the earlier remains to a First Palace, which probably had its main entrance by the Propylon at the north-west angle. The Second Palace represented by the ruins before us dates from the beginning of L.H. III., the great age of building activity at Mycenae. As this Palace, notably in the Staircase and Pillar Basement, was slightly remodelled in the L.H. III. period, so we can imagine the First Palace to have undergone changes in L.H. II. under the rule of the earlier kings of the Tholos Tomb Dynasty.<sup>1</sup> The disappearance of most of the First Palace and absence of L.H. II. pottery is due to the levelling and terracing carried out at the beginning of L.H. III. to adapt the terrain to the architects' bold designs. There are unmistakable signs of this terracing: the heavy fill below the Megaron is alone sufficient witness. Troy and Tiryns are both similar examples of big artificial terraces which have overlaid or removed the earlier remains.

#### CONCLUSIONS.

We can then sum up our results thus. In L.H. I. under the Shaft Grave Dynasty a First Palace stood on the summit of the acropolis. This, with alterations, would have served in L.H. II. for the earlier kings of the Tholos Tomb Dynasty. Later, at the beginning of L.H. III., under the most powerful and wealthiest kings of the Tholos Tomb Dynasty, a Second Palace was built here and we have before us to-day the ruins of one of its sections. This Second Palace seems to have lasted till the fall of Mycenae, and it would thus have been the home of the Atreidai, if, as we now believe, they were historical. Schliemann's imagination, which dreamt of the home of Agamemnon and Clytemnestra, was not far wrong. If there was an Agamemnon, if Homer did not

<sup>1</sup> See further Dr. Holland's commentary below, pp. 270 ff.



write pure fiction, it was in this Palace that the King of Men lived and hither he brought home his bride Clytemnestra from the banks of the Eurotas.

A. J. B. WACE.  
WINIFRED LAMB.

#### 18. ARCHITECTURAL COMMENTARY.

The existence at Mycenae of nine Tholos Tombs built consecutively over a period of about two hundred years, suggests nine kings at the least, who ruled and died at Mycenae from the end of the First Late Helladic period to the fall of Mycenae. It would be absurd to suppose that kings as wealthy as these must have been, as luxury-loving as the relics of their civilisation shew, and possessing as skilful architects and engineers as the erection of the tombs demanded, would have been content to limit their building activities to tombs. It would be very strange if each one had not tried to leave his dwelling-place more beautiful or more commodious than he found it; just as in Rome each emperor added his quota to the magnificence of the imperial residence on the Palatine, or as, in continuous development, one royal builder after another left his mark upon the Louvre. Some may have done much, some little, and some by accidental fire may have been compelled to do their work twice over. We may be sure, at any rate, that the Palace as it stands is the result of many alterations, much pulling down and setting up and many new constructions in the time that elapsed between the rise and fall of the Tholos Tomb Dynasty; and this without necessarily implying any overthrow or large-scale destruction at any time.

The sepulchres of the Shaft Grave Dynasty tell little of the architectural abilities of their occupants. Probably they dwelt on top of the citadel, but it is open to question whether their palaces were anything more than 'hoop-roofed' houses of the curvilinear Middle Helladic type,<sup>1</sup> built on a royal scale. The square-planned, flat-roofed palace of which we have the ruins, laid out on a complex scheme of many rooms, smacks very much of Crete. This distinct change in the type of building occurred between the end of Middle Helladic and the beginning of Late Helladic III. At Mycenae there is a change in the type of tomb

<sup>1</sup> *A.J.A.*, 1920, p. 326; cf. Blegen, *Korakou*, pp. 76 ff.

and it would be natural that the two should go hand in hand, and that the kings who built the tholos tombs, though not themselves Cretans, had taken over from that island much of value in men and things; or at any rate being relatively *βάρβαροι*, had encouraged Cretan immigration—probably by the quick statesmanship of piracy.<sup>1</sup> It can hardly be doubted, for example, that the school of Mycenaean fresco painting was founded by Cretan artists, and it is not impossible that the sack of Knossos about 1400 B.C. furnished craftsmen and architects to materialise the aesthetic inspirations of Late Helladic kings.

It is doubtful whether more than a few very fragmentary walls at best within the Palace area at Mycenae can be attributed to the Shaft Grave Dynasty; but from Late Helladic II. to the end of Late Helladic III. the building activity there must have been practically continuous. Mr. Wace distinguishes a First and a Second Palace, the latter shewing work of at least two phases. To me the matter does not seem anything like so simple. I do not believe that there was ever a wholesale destruction or rebuilding of the Palace here before the final catastrophe, nor do I believe that there was ever a time in its history when the Palace stood for long unchanged. If the remains of the Palace were complete, and it were possible by some touchstone to determine the exact date of each particular wall, I believe that we should find many periods of more or less extensive building.<sup>2</sup> Of course any such analysis is impossible, and it is unsafe even to say that such and such a wall or room or corridor in one section of the Palace is just contemporary with such and such another somewhere else. All that one can say with assurance is, that of two superposed or adjacent constructions one is the earlier. In practically all such cases I think that Mr. Wace's conclusions are entirely correct, but I should be inclined to go a little further and distinguish a greater number of individual operations than he has done, while admitting that my distinctions are largely hypothetical.

For example, the great circular column bases of conglomerate, of which three still lie at the top of the hill among the foundations of the Doric temple and three more by the Propylon (9),<sup>3</sup> do not look to me contemporary with the column bases in the Megaron. They are all

<sup>1</sup> It is my personal belief that the men of the Tholos Tomb Dynasty came to Greece by sea and may have raided Crete before they reached the mainland.—L. B. H.

<sup>2</sup> As many perhaps as there were kings who built tholos tombs.

<sup>3</sup> See above, pp. 211, 231.

dressed like column drums to a correct circle for their full depth, while those in the Megaron are in general of quite irregular outline with only a low raised circular area on the upper side; besides which they are very much larger, the diameter being 1.10 m. as opposed to .57 m. I should conclude that the larger, more carefully worked bases are the later; and since they cannot have been moved very far from their original positions—certainly those on top have not been carried up the hill since the Palace was destroyed—I feel quite confident that they belonged to some great structure that crowned the citadel,<sup>1</sup> built at a later date than the Megaron. At Tiryns we have an example of the addition of megaron to megaron in an increasing scale of splendour, the oldest structures being pulled down to make room for the newest. So here I would suggest that the earliest Palace once stood on top of the hill, probably facing south as all good buildings should in Greece, with long terraces in front. Then at the beginning of Late Helladic III. some king desiring a more sumptuous hall than any his forefathers knew, and finding little unbuilt space available, extended the Palace area to the south-east by means of great terrace walls and built there the Megaron (55, 56, 57). And still another king, perhaps his direct successor, fired with the same desire to surpass anything his world had seen before, cleared off the oldest structures on the upper level and built himself another Megaron. If the comparison of the column bases is any indication, it must have outshone the existing Megaron in magnificence, as the Tholos Tombs of the third period surpass those of the second.<sup>2</sup> I should think that, like the earlier structures on the summit, it would have faced the south; its remains may have caused the Doric Temple built upon it to be similarly set with quite uncanonical orientation.

Two of the great column bases found in the Propylon (those between 9 and 10, see plan, Pl. II.) are similar to those on top of the hill; all are 1.10 m. in diameter and .40 m. thick. Presumably they all belong to the same building period. But the third one, to the north of 9, though it has the same diameter, is only .15 m. thick. This suggests that it was not the exact contemporary of the others, and yet the uniformity of size indicates that it belonged to the same structure as the two near by.

<sup>1</sup> See above, pp. 231 ff.

<sup>2</sup> See below, pp. 388 ff. In point of scale and workmanship they seem closely related to the masonry of the Treasury of Atreus; probably they are not very far apart in date.

Now Mr. Wace has pointed out that the retaining walls to the east and west of the third column base are of inferior workmanship to the main West Terrace Wall running south from where the other column bases lie.<sup>1</sup> He believes the poorer work to be the older; yet as the third column base can hardly antedate those in the Megaron (which have a thickness of .37 m.), he suggests that it belonged to a remodelling of an older Propylon. But the poorer walls are built of larger stones than the others and it is my opinion that they are later; that when the great hall was built on the top of the hill a propylon was also built hereabouts, perhaps at 10; and that the two heavy column bases belonged to it. Now if all these great works were built by the king who built the Treasury of Atreus, it is probable that the work of any succeeding king would be less massive in structure, just as the Tomb of Clytemnestra is less massive than the Treasury of Atreus, while the Tomb of Genii marks a great decline in art and wealth. It may be that the king who ordered this last tomb, building as best he could with straitened means, added the Propylon (9), matching the earlier column bases with one of equal area but of less than half their weight. The pavement (7), the massive terrace corner north-west of 6 and the Guardroom (3, 4)<sup>2</sup> may also belong to this or to a slightly earlier reign.

Apart from the size and quality of the masonry there is another difference between the wall flanking 9 and the main West Terrace Wall. The latter is laid out in a series of rectangular offsets, of various sizes but all with faces strictly parallel, running north and south or east and west, except for a corner south-west of 45, which curiously enough is just parallel to the 'Old Wall' west of 51. But the walls west of 9 and east of 7 shew no such parallelism, either with each other or with the main southward stretch. Evidently the two sections are not contemporary, the more careless wall must be earlier or, as I think, later than the other. Furthermore it seems hardly possible that the southern stretch of the West Terrace Wall can be contemporary with the Western Portal (45) or the room north of it 41, or the Room of the Throne to the south (52); for while it shews such remarkable accuracy in its own alignment, it is not at all parallel to any of these other structures.

And yet there is a sort of relation between the terrace wall and the buildings within. The Western Portal can be restored with reasonable

<sup>1</sup> See above, p. 213.

<sup>2</sup> See above, pp. 213 ff.

accuracy. In plan it was probably like a letter H, with the conglomerate sill forming the cross bar. The south wall would have run west for a distance equal to the north wall and also the same distance eastwards. This would bring the south-east anta opposite an anta at the end of the wall between 41 and 39, at which point there was a set-back in the north wall of the South Corridor. The gate-house of the Western Portal was certainly roofed, the area to the east probably unroofed, and the South Corridor (37) and passage (49) roofed again. Where the figure 40 is, there was probably some sort of a sill or step running from anta to anta. The plaster floor seems to stop at that line; it has been more or less preserved where there was a roof, but in the open area it is noticeably gone.<sup>1</sup> The open area I believe to have been bounded on the south by a continuation of the wall south of 49; this would have run westwards until it met a wall at right angles coming southwards from the south-east anta.<sup>2</sup> Now if we correlate the Western Portal and forecourt thus restored with the existing West Terrace Wall, we find that there is a break, a small bit of east-west wall and a re-entrant angle in the latter directly east of the north-west anta of the Portal. Following the Terrace Wall south we find a similar, though smaller, break due east of the south-west corner of the Portal; then comes the bias angle of the Terrace Wall, and then due south of the same south-west corner of the Portal the terrace resumes its normal north-south direction. And at the next break the Terrace Wall turns east on a line due east of the projecting exterior corner of the forecourt. It seems to me that this correspondence can hardly be the result of mere chance; on the other hand, it does not seem probable that the Western Portal and forecourt were controlled in their design by any such queer relation to a pre-existing terrace wall. But it does seem to me quite reasonable that the Terrace Wall, if it were a later construction, should break and bend in relation to the older Palace

<sup>1</sup> It must, however, be remembered that this region has not only suffered from continuous denudation and Hellenistic disturbance, but also from exposure to the weather since Tsountas' excavations.—A. J. B. W.

<sup>2</sup> I seriously question Tsountas' suggestion that a stair led north from the little forecourt thus formed up through 39. Unless the stair were of wood, which seems hardly probable considering the size and importance that a stair in this position would presumably have, there should be traces of masonry left, or cuttings in the rock, and there is absolutely no evidence of either. I think it more likely that 39 was a low unfinished space left when the terrace above was built, and served perhaps as a guardroom like the porter's hole similarly placed inside the Lion Gate.

structures. On account of the excellence of its workmanship and the remarkable accuracy of its rectangularity and parallelism I should consider it contemporary with the massive column bases of the hall which crowned the hill and with those of the Propylon.<sup>1</sup> Apparently the wall was built from north to south and was left with an unfinished end at its southern extremity.<sup>2</sup>

There remains to be explained the bias bastion south-west of the south-west corner of the Western Portal. This has the same orientation as the 'Old Wall' south-west of 51, which, as Mr. Wace has shewn, is as old as or older than the Pillar Basement, which in turn is older than the Grand Staircase and at least as old as the Room of the Throne (52). The 'Old Wall' then, though I should hardly think it earlier than Late Helladic II., is certainly older than the Western Portal, which may very well be contemporary with the Room of the Throne. Now if its line be continued straight to the north-west, it will be found that the south-west anta of the Portal would project slightly beyond it. I suspect that the 'Old Wall' did actually once follow this line and probably continued to the north as a retaining wall for an earlier inclined approach. Then when the Portal was built a bastion had to be stuck on to the west face of the 'Old Wall,' at right angles to it, to provide for the projection of the new south-west anta. Then, when the later West Terrace Wall was laid out, the line of the bastion, though bias to the new system, was retained in order to maintain circulation around the still existent south-west anta of the Portal.

The Pillar Basement I think was originally an open portico facing south, with a pier at the point where the 'Old Wall' now forms a re-entrant angle with the later west wall of the Grand Staircase and two more piers (the base of one of which has been found) between it and the west wall of the Court. The object of this portico would be to carry a terrace in front of the Room of the Throne (52), without the expense of building a solid retaining wall and filling in behind it, as was done later when the Grand Staircase was built. The door of the red sandstone sill would have given access to this terrace from the Court on the east. The present Room of the Throne with its conglomerate sills seems to me contemporary with the monumental scheme of Court and Megaron, but I suspect that the pillared portico below was slightly earlier and that an

<sup>1</sup> See, however, above, p. 209, note 1.

<sup>2</sup> See above, p. 161.

earlier room, of the same dimensions and in the same situation as the existing Room of the Throne, was built here when the portico was built. My reasons for thinking this are that the foundations of the west and south walls of the Room of the Throne and the wall to the east of the Pillar Basement seem to deviate very slightly from the line of the upper walls; and in particular it seems doubtful if the red sandstone sill can be contemporary with the conglomerate sills used everywhere else.

It seems to me unquestionable that the Room of the Throne had some interior support for the ceiling, especially as there was a storey above it, yet two columns would make the span of the beams much smaller than in the Megaron. A single column in the centre of the room would be excellent from the structural point of view, but since it would come directly in front of the throne, it seems rather a preposterous arrangement. In the great square room<sup>1</sup> formed by the upper landing of the Grand Staircase (above 63) there is now only one certain position for a support, that is, directly over the pier or column which stood like a newel-post at the foot of the stairs below. A lone support thus asymmetrically placed, though not impossible, would certainly be queer. On the other hand, to balance this one column with a second one would require a support below, just about where the figure 63 now is. This in turn might seem odd in the lower room, but taking both floors into consideration, it seems to me the more probable arrangement. Either scheme might have been used in the Room of the Throne.

The restoration of the Megaron raises some questions also. First, had it a second storey? To me this seems more than improbable. The great hall has an area of about 12.75 m. by 5.75 m., and there are only four supports about .50 m. in diameter to hold up the superstructure, with spans between them reaching 4.40 m. in the clear. The front wall is only .90 m. thick, the east and south walls were probably no heavier. No builder at the present day would think of setting masonry walls in an upper storey on a ceiling so lightly borne, without steel girders for the bearing spans. But if no masonry walls were carried on the ceiling beams, then an upper storey would have been one great hall exactly like that below. Similarly the idea of a clerestory above the central area between the columns is structurally unsound, for the clerestory walls would have to be of stone or crude brick, and even with many windows

<sup>1</sup> This was almost the same in shape and size as the Room of the Throne.

in them, their weight would be too great to be safely borne by beams 4.50 m. in length resting on isolated columns. At Tiryns, where the Palace had certainly the same arrangement as here, a clerestory seems even less probable, for the longest span between columns there is five metres in the clear. And earthquakes are not rare in Greece. The same objections apply to a storey above the Porch, though with slightly less force, since no spans there exceed four metres. The Vestibule (56) is the only section which could well carry a storey above it, and even there internal partitions would not be safe.

The second question is whether the ceiling of the Megaron was continuous or open in the central area above the hearth, which probably served more than purely ceremonial uses. In the *Odyssey*, Odysseus advises Telemachus that if the suitors should ask him why he had removed all weapons from the Megaron, he should say that he was putting them away from the smoke, 'for they are wholly marred, so mightily hath passed upon them the vapour of fire.'<sup>1</sup> Again, a chair is set for Penelope in the hall 'before the fire,' though the fire here is apparently in braziers and not directly upon a hearth;<sup>2</sup> and in the same scene Odysseus 'sat apart from the hearth' that he might not be recognised by Eurycleia.<sup>3</sup> Melanthius lights the 'never-resting fire' in the halls in order to melt a ball of lard to grease the bow of Odysseus.<sup>4</sup> So unless the ceilings were extremely high or had outlets in them for the smoke, the halls of Homer must have been almost uninhabitable. Apart from this, the very plan points to a central opening in the roof of the Megaron, for the spacing of the columns is not uniform. At Mycenae the clear spans are, approximately, from front to rear:—3.60 m., 4.40 m., 3.60 m.; and from side to side:—3.25 m., 3.90 m., 3.25 m. At Tiryns the spans from front to rear are, approximately:—2.90 m., 4.75 m., 2.90 m.; and from side to side:—2.60 m., 3.40 m., 2.60 m. Such an irregularity in spans, particularly that from front to rear at Tiryns, would be quite unreasonable in a room with a continuous roof, as it would involve the use of considerably heavier material to cover the large central area than would be necessary if the spans were evenly apportioned.<sup>5</sup> With an open

<sup>1</sup> xix. 4-9.<sup>2</sup> xix. 55.<sup>3</sup> xix. 388-389.<sup>4</sup> xxi. 181.

<sup>5</sup> The front and rear porticoes are slightly deeper than those on the sides, but the span of the central bays is longer at the sides than at the front and rear. It follows, therefore, that the areas of the central bays on all four sides and the consequent loads to be borne by the architraves are equalled. At Mycenae the areas are 14.04 sq. m. in front and rear and 14.30 sq. m. at the sides.



centre, however, the plan becomes perfectly intelligible.<sup>1</sup> The arrangement is similar to that of a Roman *atrium*, which was a living room in a colder climate. There what amounts to a small court is surrounded on all four sides by porticoes of nearly uniform depth.<sup>2</sup>

In Mycenaean restoration there is always danger of being over-influenced by the well-known architecture of Knossos. This, I think, is rather an uncertain guide for the mainland, for the Palace at Knossos is some two centuries older than the main development of that at Mycenae. It can hardly be doubted that the Mycenaean architectural style owes its origin at least to actual Cretan builders working on mainland palaces; for while styles in pottery and fabrics and small wares in general may be diffused by trade, with architecture, as with fresco painting, the case is different. In these arts it is much more easy to transport the craftsmen than their products. The immigrant Cretan architects, however, would be working in a new climate and probably for masters of different race and habits of life. New programmes, new materials and the developments of two hundred years of building would inevitably cause noticeable changes in any architectural style.

The proportions of some of the columns at Knossos are known.<sup>3</sup> On the Staircase there, in the Hall of Colonnades, the Queen's Megaron, and the Royal Villa, they range in height from four-and-a half to over five times the diameter on the base. The stone columns applied to the façade of the Treasury of Atreus, presumably copies of contemporary wooden ones, are in height about eight times the width of the lower square base and about twelve times the diameter of the shaft itself at the bottom. Those in the Tomb of Clytemnestra are about thirteen times the diameter of the base and about fifteen times the diameter of the bottom of the shaft. On the tombs of the Persian kings at Naksh-i-Rustum<sup>4</sup> the rock-cut columns, also presumably reproducing wooden originals, and the actual examples from the palaces<sup>5</sup> range from ten to twelve times the lower diameter of the shaft, or from a little under seven

<sup>1</sup> Regularly spaced spans would necessitate a smaller hearth; perhaps the irregular spacing was demanded by the size of the hearth.—A. J. B. W.

<sup>2</sup> Assuming the Megaron to be a living-room, a hole in its roof 4.40 m. by 3.90 m. in area would be extremely inconvenient in the rainy season, when a fire on the hearth would be most needed.—A. J. B. W.

<sup>3</sup> See above, p. 211.

<sup>4</sup> Perrot-Chipiez, *Hist. de l'Art*, V, Pl. I, pp. 623, 628, Figs. 386, 392.

<sup>5</sup> *Ibid.*, *op. cit.*, p. 497, Fig. 318.

to a little over eight times the diameter of the base, as in the Treasury of Atreus. But the situations of the Knossian examples are not quite analogous, for they bear in every case the heavy load of superposed storeys, whereas the others are from one-storey structures and carry nothing but their own entablatures and roofs. It is natural that the more heavily loaded shafts should have the more sturdy proportions. The spans between, as well as the proportions of the columns, are also affected by the loads to be carried. At Knossos in the examples cited the spans range from 2.00 m. to about 2.50 m. in the clear; at Mycenae in the Room of the Throne, which surely had a storey above it,<sup>1</sup> the spans (if there were columns) seem probably to have been about 1.25 m. to 2.75 m., and in the Staircase, another two-storey structure,<sup>1</sup> the spans would be about the same. On the other hand, in the Megaron the spans run from 3.25 m. to 4.40 m. in the clear, and at Knossos in the West Portico and the South Propylaea there are spans of nearly 5.00 m. I think that this indicates and is explained by the fact that in all these latter cases the columns bore no upper storey.

In spite of this variation in the actual width of the spans and in the individual proportions of the columns considered, the proportion of span to column height shews a reasonable uniformity. The height of the known columns at Knossos is slightly greater than the clear span. On the Treasury of Atreus they are about one-and-a half times the span, on the Tomb of Clytemnestra about one-and-two-thirds, and in the Persian examples from one-and-three-quarters to a little over two times the span. For the Megaron at Mycenae, approximately contemporary with the Treasury of Atreus, we may safely assume a height for the columns equal to one-and-a quarter times the clear span. Since the height of all the columns must obviously be the same, we must reckon from an average span, say 3.60 m. This would give us a column height of 4.50 m., just about eight times the width of the base, so that the columns would be very nearly of the proportions of those at the Treasury of Atreus.

Another indication of the height of the columns of the Megaron may be gained from the proportions of the doorway. In all the tholos tombs the height of the door opening is equal to twice its width at the bottom, with only very slight variations above and below this standard, in spite of wide variations in actual size. The proportions seem so fixed

<sup>1</sup> There were not necessarily any partition walls here.—A. J. B. W.

that we may safely assume them to be those of non-mortuary doorways. The sills of the Megaron shew that the door openings there, at the bottom, were about 1.75 m. wide. The height then should have been 3.50 m.; to which the trim round the opening, the width of which is indicated at the bottom of the jambs, would add another .75 m. Supposing that the round ends of the ceiling beams of the Vestibule had come directly above the door trim, as they are shewn in the Tomb of Clytemnestra, and that, as is most natural, the bottom of the architraves of the Porch had come at their upper line, we must include the thickness of the beam ends, say .20 m., in the total height of the columns. This gives us  $3.50 \text{ m.} + .75 \text{ m.} + .20 \text{ m.} = 4.45 \text{ m.}$ , just .05 m. less than the height arrived at by proportioning it to the span. Of course the roof of the Vestibule might not have rested directly on the lintels of the doors, in which case the columns would have been somewhat higher, but they could hardly have been lower, and I doubt much greater height.

Fifteen feet (4.50 m.) would warrant the epithets 'lofty pillars' and 'high-roofed hall' found in Homer. The architrave, ceiling beams and thick clay roof above would add another metre and bring the upper surface of the roof about 5.50 m. above the floor, or in this instance to about level 77.55. This is about 1.40 m. higher than the cement floor to the north at 24, but it must be very nearly the level of the floor above the Ante-Chamber (33). It is obvious that 33 and 34 and the stairway at 31, 32 must have been roofed, to keep the whole area from draining as a stream into the Porch of the Megaron. The level of 33 is 74.07; the floor above must have been at least 3.00 m. higher to allow for headroom. The Grand Staircase has a rise of 1 to 3 of run; the little stair (47) about 1 of rise to  $2\frac{2}{3}$  of run. The length of the runs of 31 and 32 minus the necessary stair landings is about 8.50 m.; using the steeper gradient this would give a total rise for the stairs of 3.20 m., and .28 m. more would bring the upper storey up to the assumed level for the roof of the Megaron. This extra height could easily be gained by a step or two across the landing as at Knossos. At a minimum the floor above (33) must have been .75 m. above the cement floor to the north (23). The top of a roof above 34, allowing 2.00 m. in the clear for headroom, could not have been lower than 76.65 or .50 m. above the level of the area to the north.

In view of all this I should be inclined to restore a floor above 33 flush with the roof of the Megaron, at level 77.55 or thereabouts. Over

the upper floor of **33** and the stairs (**31, 32**) there would be a roof carried on upper walls. The ramping South Corridor (**37**) at one period reached a height of 75.50 at **35**, where the remains of a conglomerate sill still are. It does not seem reasonable to me that the South Corridor should ever have been wholly abandoned as a means of access to the upper levels of the Palace. I think it more likely that when the entrance (**34**) to the Porch of the Megaron was made,<sup>1</sup> a flight of steps carried on beams was built above to lead from the east end of the South Corridor to the floor above **33**. This would require a rise of 1.05 m. from the conglomerate sill and a consequent run of 5.45 m. to 6.15 m. according to the gradient used. Now from the west end of the abandoned sill (**35**) to the east face of the wall at the west end of **33** is 5.50 m. There is no room to spare, and it may be that it was in order to allow sufficient run for this stair that the west wall of **33** was thickened by doubling—at least I can find no other reason for this curious bit of construction. It may also be that the conglomerate sill was cut and the earth removed from under it back to the remnant of wall across the South Corridor, just east of **35** in order to leave the wooden staircase free on its underside.

If the stairs (**31, 32**) were built primarily to serve the area to the north it seems very strange that they should have been carried to a height of .75 m. above the pavement there. It may be that when the stairs were built the level to the north was raised and bits of pavement now seen there were covered up, or it is just possible that another stair at **24** led from the west end of the room over **33** up a metre or so to the terrace or building over **36**, the floor of which must have stood at least at level 78.53. In the latter case the area to the north of the stairway would only be secondarily served by this system of circulation. The evidence here is too scanty for me to feel very much confidence in any definite restoration.

This, however, seems certain; the great rectangular construction above **36** and **38** antedates the building operation which laid out the Court, the Megaron and the Room of the Throne as they now stand. And I think that it is also fairly obvious that it is not so ancient as the building about **39** and **41**. The walls of the latter are not continuous with the other walls, but are built on a narrower plan, and further are not aligned with anything like the rectangularity and parallelism of the

<sup>1</sup> See above, p. 261.

other work. The piece of wall between 41 and 42 is probably still earlier than the building about 39 and 41, though if it formed part of a latrine or some such structure it might be contemporary. The fact that the pottery found here shews the work in this region to be older than the Court and Megaron bears out the evidence of the walls themselves. To the north beside the figure 17 there is a bit of wall which shews at one place the marks of small pieces of wood imbedded across it in clay. The masonry is of small stones not laid evenly to a line, and the wall as a whole is not quite parallel to the wall north of 38 nor to that north of 41. I do not think then that it can be contemporary with either of them. On the other hand, it is almost exactly at right angles to the west wall of the structure built over 41 and 39, which fact could be explained on the grounds that it preceded the other and dictated its alignment. As Mr. Wace points out,<sup>1</sup> the presence of clay plaster on the face of the wall by 17 below the level of the North Corridor shews that it is older than the corridor. He assigns it tentatively to the First Palace; it is certainly one of the oldest fragments of any considerable size, but I do not think necessarily earlier than Late Helladic II.

A few parts of the Palace then can be arranged in chronological sequence with reasonable assurance thus:—I. Wall by 17; II. Structure over 41 and 39; III. Structure over 38 and 36 and probably 37; IV. Megaron, Court, and Room of the Throne; V. Structure employing the great conglomerate column bases on top of the hill. Another series can be formulated thus:—I. 'Old Wall' south-west of 51; II. Pillar Basement and perhaps an early room at 52; III. Main section of West Terrace Wall, Propylon, Terrace (6) and Guardroom (3, 4). I believe that the Pillar Basement antedates the general lay-out of the Megaron, Court and Throne Room, and I believe that these in turn antedate the main section of the West Terrace Wall, though in these cases the proof is not so definite as in the case of the two sequences given above. I am inclined to group as contemporaries:—I. The Pillar Basement, and early room at 52 and the large rectangular structure above 36, 38; II. The Western Portal, the Megaron, Court and Throne Room; III. The column bases on top of the hill, the similar bases between 9 and 10, and the West Terrace Wall. I should certainly hesitate to suggest any other sequences or groups.

LEICESTER B. HOLLAND.

<sup>1</sup> See above, p. 222.

## EXCAVATIONS AT MYCENAE.

### § IX.—THE THOLOS TOMBS.

(PLATES XLIV.—LXI.)

#### I. INTRODUCTION.

At the time of Schliemann's excavations in 1876 six tholos tombs were known at Mycenae, the Treasury of Atreus, the Tomb of Clytemnestra, the Lion Tomb, the Epano Phournos, the Cyclopean Tomb and the Kato Phournos. Most of these had been seen by earlier travellers, such as Leake and Dodwell.<sup>1</sup> Lord Sligo<sup>2</sup> and Lord Elgin<sup>3</sup> had conducted explorations in the Treasury of Atreus: Veli Pasha had attacked the Tomb of Clytemnestra, and apparently was responsible for the destruction of its dome.<sup>4</sup> Steffen marks all these six on his excellent map of Mycenae and its environs.<sup>5</sup> Schliemann in 1873 and 1876 was the first to begin the excavation of the tholos tombs. He made some tests in the Treasury of Atreus,<sup>6</sup> and Mrs. Schliemann superintended the operations intended to clear the Tomb of Clytemnestra,<sup>7</sup> but she was unable to complete them. By 1879 Stamatakes had cleared the dromos and chambers of the Treasury of Atreus,<sup>8</sup> which, till then, as shewn clearly in the Elgin drawings preserved in the British Museum, were blocked with a large accumulation of earth.<sup>9</sup> In 1886 Tsountas<sup>10</sup>

<sup>1</sup> See Bibliography below, p. 286.

<sup>2</sup> Laurent, *Classical Tour*, p. 145; *J.H.S.* 1916, p. 281.

<sup>3</sup> *J.H.S.* 1916, pp. 213, 214.

<sup>4</sup> Schliemann, *Mycenae*, p. 42; cf. Belger, *Beiträge z. Kenntnis d. Griech. Kuppelgräber*, pp. 22 ff.

<sup>5</sup> *Karten von Mykenai*, Pl. I.

<sup>6</sup> *Mycenae*, p. 46.

<sup>7</sup> Schliemann, *op. cit.* pp. 102, 119, 140 ff.

<sup>8</sup> *Πρακτικά*, 1879, p. 16.

<sup>9</sup> See also *Expédition de Morée*, II. Pl. 69; Stuart-Revet, *Antiquities of Athens*, Supplement, Pls. 1 and 3.

<sup>10</sup> *Πρακτικά*, 1886 *et seqq.*

commenced his long and fruitful series of excavations, and among other important finds was rewarded by the discovery of three more tholos tombs. In 1887 he found and cleared the Panagia Tomb; in 1892 he found the Tomb of Aegisthus, which unfortunately he was not able to excavate; and in 1896 the Tomb of Genii (so-called Perfect Tomb). In addition he cleared all the other tholoi, except the Epano Phournos, where the practical difficulties were too great. In the course of our four campaigns at Mycenae we have re-examined all the tholoi, but like Tsountas were unable to clear the Epano Phournos, and were not allowed to carry to a conclusion the clearing of the Tomb of Aegisthus, which we began in 1922. The results here published are therefore to some extent provisional, but embody our principal observations as to the evolution and history of the tholos tombs of Mycenae from the point of view of construction and material. The conclusions set out below depend perhaps more on architectural considerations than on the evidences of date derived from a study of the objects found within them. This latter class of evidence is always somewhat untrustworthy, because none of the tholoi were unplundered and the original sepulchral deposits have been disturbed and practically all objects of value removed. Such disturbance would tend to introduce extraneous objects, and even if one finds Mycenaean pottery in a tholos tomb, there is no proof that it really belongs to the earliest or any interment therein. Further, in most cases the collapse of the domes would increase the confusion and permit percolation from without. Big conspicuous tombs like the tholoi must have been plundered very soon after the downfall of Mycenae, as is shewn by the presence of Geometric pottery in so many of them. If also the practice of successive interments was as common in the royal tholos tombs as in the private chamber tombs, as, for instance, in the Kalkani cemetery, the disturbance of the earliest sepulchral deposits<sup>1</sup> would have begun not so very long after the tombs were first made and used.

It is safer to treat the Mycenae tholoi, including the tholos at the Argive Heraion, as a separate group, because the methods of construction are bound to vary from district to district with the variations in the local material ready to hand. It is therefore inadvisable to argue from constructional peculiarities of tholoi elsewhere in the Peloponnese, in Attica or in Thessaly, unless there is other evidence available, in support

<sup>1</sup> See Section XIV, the Kalkani Cemetery; cf. Tsountas, *Πρακτικά*, 1896, p. 30.

of theories as to the Mycenaean tholoi. Still more so should the architectural parallels of Crete be used with great caution, since the whole environment of the Minoan civilisation in that island was different from that prevailing at Mycenae and on the mainland.

Further discoveries may modify our conclusions and it is always possible that there are more tholoi still to be unearthed at Mycenae, but

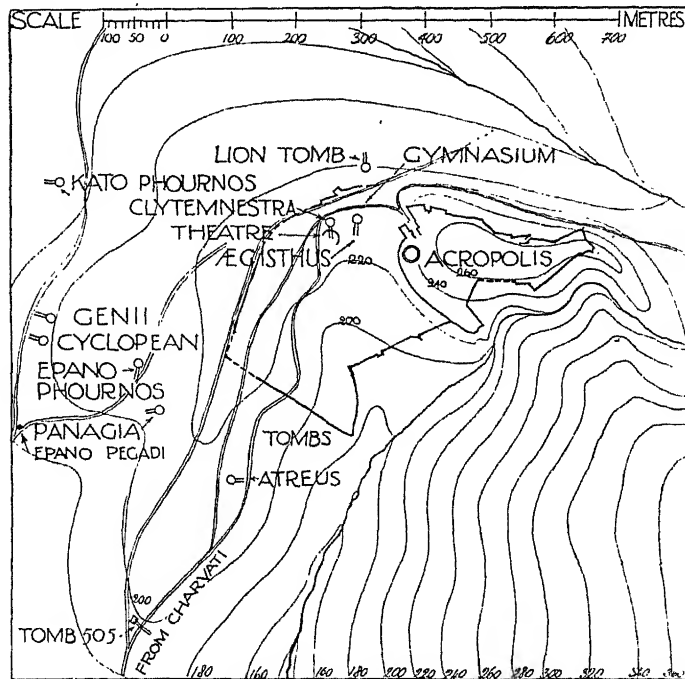


FIG. 49.—MYCENAE; SKETCH PLAN SHEWING RELATIONSHIP OF BRONZE AGE ACROPOLIS AND HELLENISTIC LOWER TOWN AND POSITIONS OF THE NINE THOLOS TOMBS.

we have endeavoured to follow what seemed to us the right avenue of approach to the problems connected with the tholoi of Mycenae.

Our researches have encouraged us to divide the nine tholos tombs of Mycenae into three groups of three each, which are successively described in the following pages. To the first group belong the Cyclopean Tomb, the Eparno Phournos and the Tomb of Aegisthus. To the second fall the Kato Phournos, the Panagia Tomb and the Lion Tomb, and with it we may also class the tholos tomb at the Argive Heraion. In the third group come the Treasury of Atreus, which is known locally as the Tomb



of Agamemnon, the Tomb of Clytemnestra and the Tomb of Genii, the so-called Perfect Tholos Tomb. Their positions are shewn in Fig. 49.

In studying them I have always had the close co-operation of Dr. Blegen, who would, had circumstances allowed, have taken part in this report, Mr. P. De Jong, to whose skill the plans are due, and Dr. Leicester Holland, who has read the MS. and amended the accounts of certain architectural details. I also owe much to discussions of various points with Professor Orlandos, Mr. Kitson Clark, and many other friends, too numerous to mention here by name.

#### BIBLIOGRAPHY.

The following is a list of some of the principal travellers since the beginning of the last century and previous to Schliemann's excavations, who have left descriptions of some or other of the tholos tombs. The names are arranged chronologically. References to illustrations are included.

- |            |                        |   |
|------------|------------------------|---|
| Date.      |                        |   |
| 1801-1806. | Dodwell.               | <i>Cyclopean and Pelasgic remains</i> , Introduction, pp. 9, 10, Plates 9, 10 and 11.   |
|            |                        | <i>Tour through Greece</i> , pp. 229-234. (Illustrated.)  |
| 1802.      | Lord Elgin.            | <i>Letter from Lady Elgin to her mother: J.H.S.</i> 1916, p. 213. On p. 214 is a reference to the clearing of the doorway of the 'Treasury of Atreus,' by the Voivode of Nauplia. |
| 1804-1806. | Pomardi.               | <i>Viaggio nella Grecia</i> , ii. pp. 117-119.  |
| 1806.      | Leake.                 | (For the second time.) <i>Morea</i> , vol. ii. pp. 373-385.   |
| 1810.      | Lusieri.               | <i>Letter to Lord Elgin: J.H.S.</i> 1916, p. 281 (refers to Veli Pasha's excavation).   |
|            |                        | Drawings among the Elgin Papers in the British Museum, see Stuart-Revet, <i>Antiquities of Athens</i> , Supplement.   |
| 1810.      | Gell.                  | <i>Argolis</i> , pp. 29-35, Pls. 4, 5, 6, 7.  |
| 1813.      | Turner.                | <i>Journal of a Tour in the Levant</i> , vol. i., p. 288.   |
| 1813.      | Pouqueville.           | <i>Travels in the Morea</i> , p. 224.   |
| 1816.      | Gell.                  | <i>Itinerary</i> , p. 162.  |
| 1818.      | Laurent.               | <i>Recollections of a Classical Tour made in 1818-19</i> , vol. i. pp. 273-277 (refers to Sligo's excavations).   |
| 1818.      | Clarke.                | <i>Travels</i> , vol. vi. pp. 492-506.  |
| 1825.      | Prokesch<br>von Osten. | <i>Denkwürdigkeiten</i> , vol. ii. pp. 254-262.   |

Date.		
1830.	Hughes.	<i>Travels in Greece</i> , vol. i. pp. 229-234.
1830.	Trant.	<i>Narrative of a Journey through Greece in 1830</i> , pp. 136-138.
1832.	Lacour.	<i>Excursions in Greece</i> , pp. 296-298.
1833.	Blouet.	<i>Expédition Scientifique de Morée</i> , vol. ii. 149, 150, Pls. 66-71.
1834.	Burgess.	<i>Greece and the Levant</i> , vol. i. pp. 178-180.
1838.	Mure.	<i>Journal of a Tour in Greece</i> , vol. ii. pp. 166, 167.
1840.	Buchon.	<i>La Grèce et la Morée</i> , p. 386.
1841.	Aldenhoven.	<i>Itinéraire de l'Attique et du Péloponnèse</i> , pp. 391, 392.
1842.	Welcker.	<i>Tagebuch einer Griechischen Reise</i> , vol. i. pp. 179-182.
1852.	Curtius.	<i>Peloponnesos</i> , vol. ii. pp. 407-411.
1853.	Vischer.	<i>Erinnerungen</i> , pp. 308-311.
1858.	W. G. Clark.	<i>Peloponnesese</i> , pp. 73-81.
1862.	Schaub.	<i>Excursion en Grèce</i> , pp. 228, 229.

Haller, a companion of Cockerell, seems to have visited Mycenae, in 1810(?) and given an account; see S. Reinach in *Rev. Arch.* vol. vi. 1905, p. 465, where a summary list of travellers is given. Cockerell's visit is referred to by Leake, *loc. cit.* p. 377. See also Belger, *Beiträge z. Kenntnis d. Griech. Kuppelgräber*, Berlin, 1887. Frazer, *Pausanias*, III. pp. 124 ff., and Tsountas-Manatt, *Mycenaeen Age*, give the modern literature.

## 2. THE FIRST GROUP.

Although it is of course impossible to determine with any approach to certainty the chronological order of the tombs within any group, we have in the description of the three groups endeavoured to arrange them in a series according to the development of their construction. The two earliest tombs, to judge by the primitive nature of their construction, are the Cyclopean Tomb and the Epano Phournos.

### A. THE CYCLOPEAN TOMB (Fig. 50).

This tomb stands on the slope of the hill a little to the north of the Epano Pegadi and a little to the south of the Tomb of Genii. It had long been known and is marked on Steffen's map. It was cleared by Tsountas in 1891,<sup>1</sup> but as no detailed account of it has ever been published we re-examined it in 1922 (Pl. XLIV. a, Fig. 50).

It was not easy to determine the length of the dromos owing to the extremely soft nature of the rock and the consequent collapse of the

<sup>1</sup> Πρακτικά, 1891, p. 19.

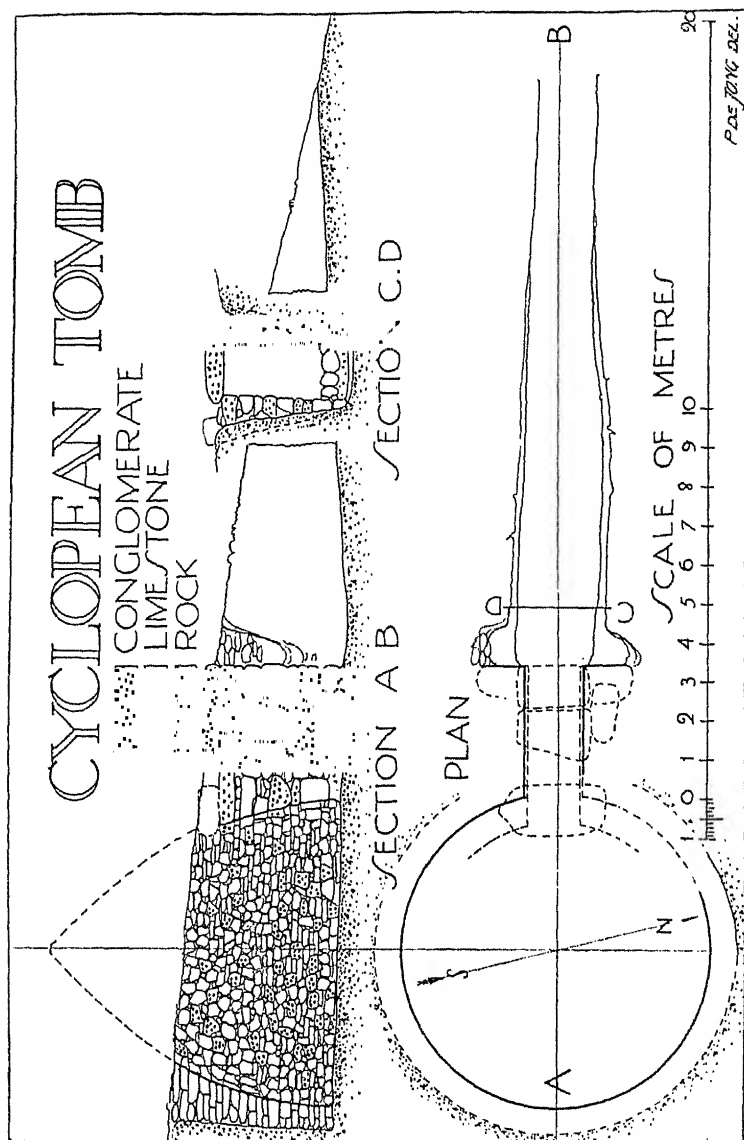


FIG. 50.

sides, which have also, towards the outer end, been much damaged by the cultivation of the surrounding land. The dromos is about two metres wide and not lined with walls of masonry, but simply cut out of the soft hillside and slopes, as far as can be made out, gently down to the floor of the tomb. The door is comparatively low, being only just over three metres high, and was closed by a rough wall of rubble masonry between the outer jambs. The side walls of the doorway, which incline slightly inwards towards the top, are built of rough undressed blocks of limestone and conglomerate, packed together in a Cyclopean manner with somewhat larger stones at the angles. Only the roughest attempt to course the stones was made, and none to choose and dress the material to give a good and homogeneous appearance to the masonry. The doorway is 1.40 m. wide and 3.40 m. deep and was roofed by three lintel blocks of conglomerate, the innermost of which has fallen in, owing to the collapse of the inner jamb on the north. These three conglomerate slabs are not dressed in any way. One can see to-day on the ridge where the modern village of Charvati stands, and elsewhere in the neighbourhood, that when a layer of conglomerate is on the surface, weathering causes the exposed edge to break off naturally into massive slabs of this type. These three lintel blocks were shaped presumably by the action of nature and not by man. It is to be remarked that the tops of the walls of the doorway are practically level with the original slope of the hillside. Consequently it seems clear that in this case, and probably in all the tholos tombs, the big lintel slabs were drawn along the slope of the hill, and then slid and slung into place across the doorways. This, with primitive appliances, was naturally a far easier method than lifting the slabs directly from the floor. No pivot-holes for the insertion of a door are to be seen in the under side, and there is no threshold. The blocks are a trifle short, and only just overlap the top edges of the masonry of the doorway. This feature is to be observed also in the Epano Phournos and the Tomb of Aegisthus, and since the latter has no relieving triangle over the lintel, it is highly probable that this tomb and the Epano Phournos also had none. This is indicated not only by the analogy of the Tomb of Aegisthus, but by the short lintel blocks, which make it improbable that a relieving triangle, such as occurs in the Tomb of Genii, should have been constructed on them to carry the weight of the super-incumbent masonry.

The tholos itself is about eight metres in diameter, and to judge by the incline of its walls as many high. In the tholos tombs where the curve of the vault is known or can be determined with practical certainty the diameter of the tholos is roughly equal to its height; that is to say, the section of the vault is a figure inscribed in a square.

The walls of the tholos are built in the same manner as the walls of the doorway, but with smaller stones. The pieces of limestone and conglomerate were used just as they came to the masons' hands without any trimming, and were packed together in a rough Cyclopean style. The inward incline of the walls is secured by counterweighting and wedging the stones that form the inside face of the vault. As an inevitable consequence of this system the wall gradually thickens towards the top. The sides of the circular excavation in the soft rock, in which the tholos was built, are not vertical, but incline inwards slightly towards the top. This inclination is less than that of the tholos. There is no trace of any stucco covering on the walls or on the floor of the tholos. The floor consists simply of the roughly levelled surface of the rock, and there is no grave-pit cut in it. The hollow visible towards the south side was made during excavation in searching for a possible grave-pit. It is thus seen that both the plan and construction of this tomb are of a very primitive type when contrasted with so finished a monument as the Treasury of Atreus.

#### *Finds.*

##### *A. Miscellaneous.*

In clearing the tomb Tsountas found the following objects:—

2818. (Athens, Nat. Mus.) Large bronze knife (Fig. 51) shaped like a butcher's knife, .445 m. long over all with a haft, .12 m. long, and the blade measures .04 m. at its widest point. The blade has only one cutting edge, which has a strong curve. There is a rounded sinking on either side of the haft, probably for a wooden handle, which, to judge by two scraps of gold foil still adhering to the side, was covered with gold leaf. Heavy knives of this type,<sup>1</sup> which recalls the curious knives from the Fourth Shaft Grave,<sup>2</sup> are rare at Mycenae, though they may be considered the prototype of the more usual and lighter knife<sup>3</sup> like that from Tomb 529.

<sup>1</sup> There is one from the Vaphio Tomb, 'Εφ. 'Αρχ. 1889, Pl. VIII. 9.

<sup>2</sup> Schliemann, *Mycenae*, Fig. 441, p. 279.

<sup>3</sup> Cf. also Evans, *Prehistoric Tombs of Knossos*, Fig. 113.

2819. (Athens, Nat. Mus.) Several fragments of an ivory rod, similar to that from Tomb 529; length at least .25 m., diameter .01 m.

A large number of pieces of gold foil.

An obsidian arrow-head, tangless, but barbed; length .025 m. at least; the tip is missing.

A button-shaped steatite whorl, probably intrusive, as it dates from L.H. III.

A bronze stud with its head covered with gold leaf, diameter .014 m.

A bronze ring, .016 m. in diameter.

A broken lentoid steatite sealstone, so worn that its design cannot now be discerned.

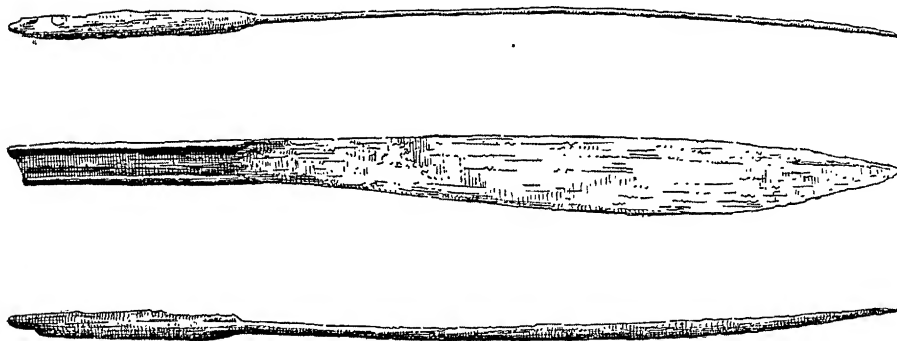


FIG. 51.—CYCLOPEAN TOMB: BRONZE KNIFE FOUND BY TSOUNTAS. (Scale 1:4.)

Tsountas also mentions a number of glass beads from a necklace which cannot now be identified.

### B. Pottery.

In re-examining the dromos and doorway and in the earth thrown out by Tsountas we found a certain number of vase fragments, some of which probably belong to the original contents of the tomb. These are as follows:—

From the Dromos:

Late Helladic II, nine sherds of vases of large amphorae of the so-called Palace Style. One of the best specimens is seen in Pl. XLV. *o*. There were twenty other sherds of L.H. II. or late L.H. I. style, among which the piece from a floral bowl with added white shewn in Pl. XLV. *n* is typical. Other sherds were parts of alabastra and of teacups with the thrush-egg or stippled pattern.<sup>1</sup>

Late Helladic III., forty sherds.

From the Doorway:

Middle Helladic, four pieces.

Late Helladic II., eight sherds.

<sup>1</sup> Cf. Blegen, *Korakou*, Fig. 67, p. 50.

Late Helladic III., twenty-six sherds.

Geometric one, and a piece of an Hellenic tile with  $\nabla$  impressed on it.

From the earth thrown out we recovered two pieces of amphorae of the Palace style and one more L.H. II. sherd from an alabastron, and fifty-three miscellaneous fragments.

If this pottery can be taken as giving any hint as to the date of the tomb, we should feel inclined to place it not earlier than the later years of the First Late Helladic Period. Still, in view of the scanty nature of the ceramic and other material evidence for dating this tomb, the style of its construction is far more important as a criterion. To this we shall return when we have considered the development of the art and technique of erecting tholos tombs, and consequently the place which this tomb occupies in the series according to the evolution of constructional principles, methods and materials.

#### B. THE EPANO PHOURNOS (Fig. 52).

In point of construction the tomb which has long been known as the Epano Phournos stands next to the Cyclopean. In fact the two tombs are so much alike that they cannot be far apart in date, and it is impossible to tell from their style which is the earlier. The Epano Phournos is marked on Steffen's map,<sup>1</sup> and was excavated by Tsountas,<sup>2</sup> who cleared the dromos, the outer end of the doorway, and the upper part of the tholos. He was unable to excavate the whole of the tholos because of the ruinous state of its walls, which threatened to fall in, and because the collapse of the inner left-hand jamb of the doorway has blocked the entrance. It is to be hoped that when the necessary mechanical means can be obtained, the fallen jamb will be rebuilt, and the tholos excavated. We had to content ourselves in 1922 with re-examining the dromos, and clearing as much of the doorway as could be done with safety.

In this tomb too the dromos, the exact length of which it is impossible to determine owing to the very soft nature of the rock, is not lined with masonry, and is simply cut out in the rock. It was four metres wide. The doorway, just over 4.50 m. high, 2 m. wide, and 5 m. deep, is built of largish blocks of conglomerate and limestone, all undressed and packed

<sup>1</sup> See also *Expédition de Morée*, Vol. II. Pl. 69, F.V.

<sup>2</sup> *Πρακτικά*, 1892, p. 56.

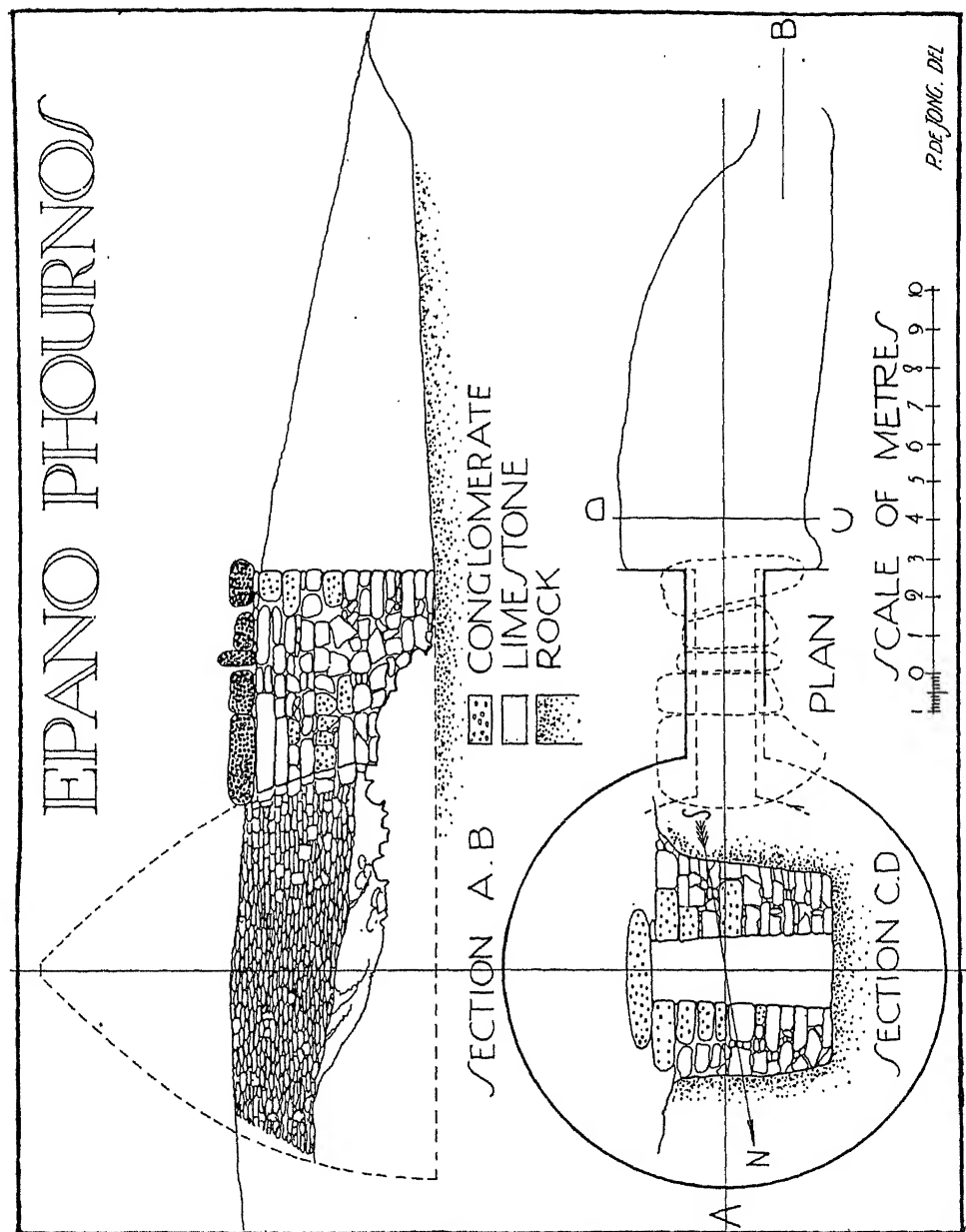


FIG. 52.



roughly together (Fig. 52). As might be expected, it is narrower at the top than the bottom and the largest stones are built into the jambs. No attempt was made to course the stone or to select one class of material to give a good appearance to the façade. The masons built up the stones in a rude Cyclopean manner, just as they came most conveniently to hand.

The doorway (Pl. XLIV. *b*) is roofed with five large lintel blocks of undressed conglomerate, which again lie on a level with the original surface of the hillside. The outermost lintel block does shew some cuttings on its upper surface, but these may be later. There are no pivot-holes for a door, and no sign of any threshold. The lintel blocks are of varying size and do not grip far over the upper edges of the walls of the doorway, so that here too, as in the case of the Cyclopean Tomb, there was probably no relieving triangle. The walls of the tholos are built of small slabs of limestone carefully packed together and counter-weighted and wedged so as to prevent the inward slope of the vault from collapse. The principle employed is perfectly sound, but the inherent instability of a vault built of such material has caused the ruin of the tomb. Small slabs of undressed stone set in a vault have no grip, and each stone that is displaced inevitably displaces many more. Progressive displacement of the masonry in this fashion combined probably with earthquake shocks ultimately brought down the whole vault. The tholos was about eleven metres in diameter and probably about ten metres high, but the marked displacement of the walls of the tholos make accurate measurement of their inclination impossible.

#### *Finds.*

##### *A. Miscellaneous.*

In clearing the front or southern portion of the doorway we found a few small ornaments which probably belonged to the tomb. These were a small fragment of ivory inlay, a small round polished amethyst bead (diam. .01 m.), and a flat and round amber bead (.02 m. in diameter and .01 m. high), and a small amount of gold leaf, much crumpled.

##### *B. Pottery.*

In addition there was a good deal of broken pottery, which can be classified as follows:—

In the dromos we found thirty-two sherds of definite L.H. III. pottery or miscellaneous sherds of L.H. type, but there was nothing that could be

undoubtedly identified as L.H. I. or II. except a certain number of fragments of a fine amphora of the so-called Palace Style, shewn reconstructed in Fig. 53, of which more pieces were discovered in the doorway. There were also fifteen



FIG. 53.—EPANO PHOURNOS: EARLY PALACE STYLE AMPHORA, RECONSTRUCTED. (Scale 1 : 6.)

sherds of Geometric pottery of the ordinary Argive type similar to that from Tiryns, Asine and the Argive Heraion.<sup>1</sup>

In the doorway there were twenty-two L.H. II. sherds of an early

<sup>1</sup> *Tiryns*, I. (W. Müller-Oelmann), pp. 135 ff.

appearance, and some fifty L.H. III. pieces. There were eighty-eight fragments of Geometric and ordinary Hellenic ware, principally the former, and a small clay spool which may be Mycenaean. In addition there were several pieces of the Palace Style amphora, Fig. 53. This is of an early appearance, but in contrast to other vases of the same style, the surface is very full of design. The amphorae from the tholoi at Kakovatos<sup>1</sup> or from the Tomb of Aegisthus<sup>2</sup> shew much more open ground in the interspaces of the design. The same is true of the group of similar amphorae from the Royal Tomb at Isopata near Knossos,<sup>3</sup> though these shew a different class of design. The maker of the amphora before us seems to have been obsessed by a *horror vacui*, and consequently filled almost every corner with a flower, quirk or similar ornament. This florid treatment would incline us to place the vase late in the class of Palace style amphorae, but that in fabric and execution it is inferior to the majority of such vases from the Tomb of Aegisthus. In any case it cannot be dated earlier than the end of L.H. I. and, like the Kakovatos, Vaphio and Thorikos vases,<sup>4</sup> it is clearly of mainland fabric.<sup>5</sup>

#### C. THE TOMB OF AEGISTHUS (Pl. XLVI.).

The third tomb of the first group, now christened the Tomb of Aegisthus, because it lies by the side of that named the Tomb of Clytemnestra, between it and the Acropolis, was discovered by Tsountas in 1892.<sup>6</sup> He cleared the upper part of the doorway on both sides, but owing to the threatening condition of the masonry did not complete the work. Some time later the Greek Archaeological Service inserted a pier of masonry in the doorway to support the innermost lintel stone, which is broken through.<sup>7</sup> We continued the excavation of the tomb in 1922, and cleared the dromos, the doorway and the two-thirds of the tholos as shewn in the plan. The remaining third was to have been cleared in 1923, but unfortunately the Committee of the British School were advised that the work was dangerous and so we were not allowed to undertake it. Thus, although we have ascertained the main lines of the plan and construction of the tomb, certain interesting details remain unknown. For instance, we do not know whether there was any burial pit in the

<sup>1</sup> *Ath. Mitt.* 1909, Pls. XVI–XXIV.

<sup>2</sup> See below, Pls. XLIX.–I.I.

<sup>3</sup> Evans, *Prehistoric Tombs*, Figs. 141–144.

<sup>4</sup> K. Müller, *Ath. Mitt.* 1909, p. 318.

<sup>5</sup> The design is common on the mainland, cf. 'Αρχ. Δελτίον III. pp. 200, 201, Figs. 144, 145 (Thebes), *Ath. Mitt.* 1909, Pls. XVIII., XIX. (Kakovatos), but of course originated in Crete, cf. Boyd-Hawes, *Gournia*, Pl. IX. 10.

<sup>6</sup> Πρακτικά, 1892, p. 57; Tsountas-Manatt, *Mycenaean Age*, p. 124.

<sup>7</sup> 'Αρχ. Δελτίον I, Παράρτημα, pp. 53 ff.

still uncleared part of the tholos, and the dromos has not yet been properly tested for any possible concealed grave-pit. Much interesting pottery which would supplement that described below undoubtedly still remains in the uncleared part of the tholos.

The dromos is about 22 m. long, 4 to 5 m. wide, and cut out in the sloping hillside partly in the earth and partly in the soft rock (Fig. 54). Where it is cut out through the earth that overlies the rock, the sides are lined with walls of rubble masonry packed tight with the tough yellow



FIG. 54.—TOMB OF AEGISTHUS: DROMOS AND FAÇADE.

clay that served the Mycenaeans for mortar. The walls are crowned by a thick layer of the same clay. At the south ends of the side walls where the dromos originally began there is on each side a large block of stone to serve as a kind of anta. On the east side of the dromos just before the façade of the doorway part of the rock has collapsed and brought down some of the lining wall above. It is clear, however, that the lining wall continued northwards, and bonded with the rubble wall of the original façade as indicated in the plan. About five metres from the present façade a shallow drain begins on the east side, and runs down southward till it reaches the beginning of the dromos. Then it turns

east and runs out under the big stone at the end of the wall. This drain is never more than .40 m. wide and at its southern end is as much as .50 m. deep.

Since the tomb was built (see Section A-B in Pl. XLVI.), a great deal of earth has accumulated on the lower slope of the hillside above the walls of the dromos, especially towards the south end or entrance, which instead of being on the surface of the slope is now nearly 4 m. below it, since we must assume that the slope of the dromos walls represents the original slope of the hillside, as in the case of other tholoi, for example the Treasury of Atreus. Part of the great quantity of pottery of all periods found in the dromos was undoubtedly brought in with this accumulated earth, and cannot therefore be used as a safe criterion for dating the tomb. At the entrance to the dromos and just outside it a great deal of Hellenistic ware was found in and near a tomb of the same date. No Hellenistic ware was found low down near the floor of the dromos, and so one may conclude that by Hellenistic times the dromos was already, partially at least, blocked with earth.

The floor surface of the dromos seems to have been made by a thin layer of the yellow clay, well trodden down above a very thin stratum of earth on the native rock. It is possible that the floor was intended to consist merely of the surface of the rock, and that the apparent floor of earth and clay was made by earth drifting within the dromos and mixing with clay from the walls while the tomb was in use, when it would be well trodden in.

The original façade and doorway of the tomb (Fig. 55) were of rubble masonry mortared with the tough yellow clay. As can be seen on the west, this façade bonded with the walls of the dromos, with which it entirely corresponded in style and construction. The doorway is roofed with three lintel-blocks, the two outer of rough limestone and the inner of conglomerate. The lintel-blocks are short and only just overlap the side walls of the doorway. As can be seen clearly from the inside, there was no relieving triangle over the lintel-blocks (Fig. 56), and enough remains of the stone-work of the façade on the outside to shew that there was never any relieving triangle there either. This fact indicates that the Cyclopean and the Epano-Phournos tombs, which have similar short lintel-blocks, also had no relieving triangles. The walls of the doorway are about 2 m. apart, and rest on the rock.

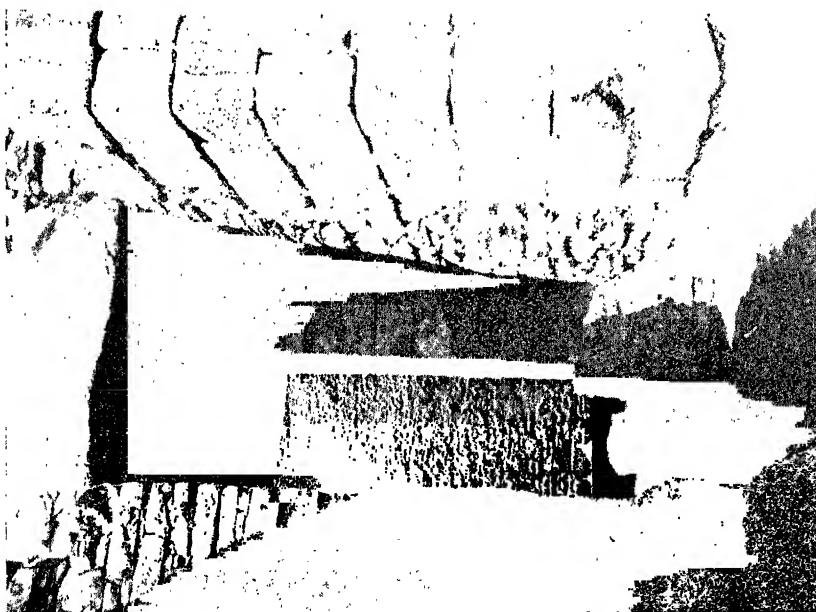
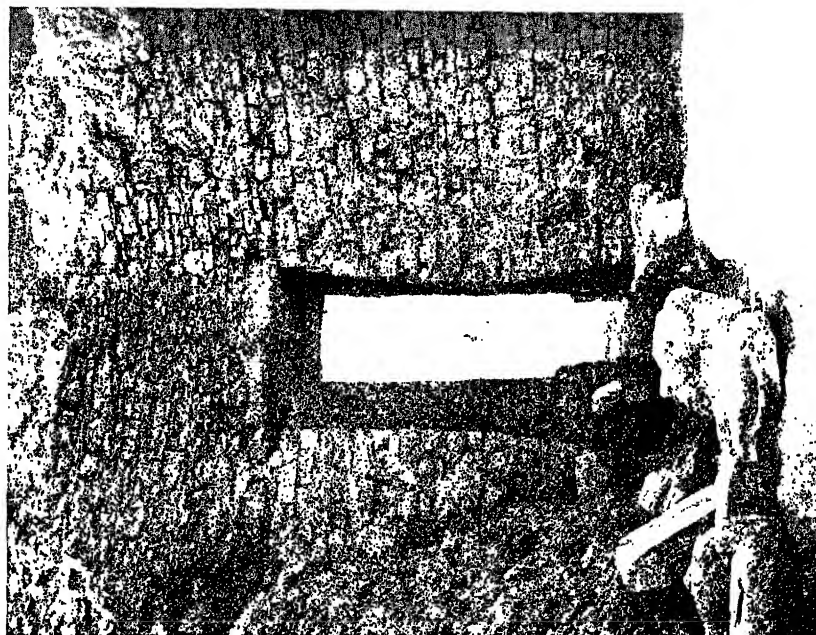


FIG. 55.—DOORWAY FROM THE DROMOS, WITH MODERN PIER OF MASONRY.



FIGS. 55, 56.—TOMB OF AEGISTHUS.

FIG. 56.—DOORWAY AND LINTEL FROM THE THOLOS, SHEWING ABSENCE OF RELIEVING TRIANGLE.

They are nearly 5 m. in height, and incline to one another slightly at the top.

Some time after the tomb was first built it was decided to improve its appearance by erecting a new and better façade in front of the original one. For this purpose the rock was cut away to a depth of some .80 m. before the façade, and a foundation of small stones with the interstices closely packed with yellow clay was laid down. On this a foundation course of large rectangular blocks of conglomerate was laid. Above them rise the piers of the second façade of good ashlar masonry. The two lowest courses are of conglomerate, while the remaining seven are of soft poros. The eastern pier still stands to its original height (Fig. 55), but the western has collapsed, though most of the stones from it were found lying in the doorway when we cleared the entrance. This ashlar work was similarly mortared with yellow clay, and the joints were then covered over with stucco,<sup>1</sup> and at the same time the older rubble-work of the side walls of the doorway were also coated with stucco. On these ashlar piers a door-frame of one fascia is cut. It is clear that this façade was an addition made at some period subsequent to the construction of the tomb with the object of making its entrance more imposing, for it supports nothing, and had no apparent connection with the vault. It is purely ornamental. It has been suggested that the successor of the king who built this tomb, instead of erecting another for himself, was content to improve the tholos of his father.

The clear fact here that the façade of ashlar work in poros is later in date than the rubble masonry is of great importance in studying the history of the development of the tholoi and of their construction. The rubble masonry and the absence of a relieving triangle shew that this tholos belongs to the first group. On the other hand, the second façade of ashlar work in poros connects it with the second group of tholoi, in which the façades are all of ashlar work in poros.

The tholos is over thirteen metres in diameter, and, like the side walls of the dromos and the doorway, is built throughout of rubble masonry. Its height, as calculated from the inward curve of the tholos wall, would also have been about thirteen metres. It is built up in a circular excavation some eight metres deep hewn out in the solid rock, with the sides

<sup>1</sup> This is the earliest appearance in the tholos tombs of stucco, which is of lime and similar to that used for covering the walls of Minoan and Mycenaean houses and palaces.

of the pit, so far as can be seen, not absolutely vertical but inclining inwards slightly towards the top. The dome would have projected above the level of the hillside. Presumably it was covered with a mound of earth as in the case of the Treasury of Atreus. The rubble masonry of the walls of the tholos thicken slightly from the bottom upwards till they reach the top of the rock, and from that point seem to have curved inwards on the outside as well as on the inside (Pl. XLVI.).

Owing to the lessened diameter the lateral pressure from this point onwards towards the top would not be too strong for the dome, provided it was well packed with earth on the outside. The inward incline of the wall of the tholos is obtained by using stones or rather slabs of considerable length and narrow frontage. These are counterweighted and wedged at the back of the wall as in the other tholoi and in the galleries at Tiryns, though not, of course, with the same elaborate care as in the latter case, which is much later in date. As remarked above in the case of the Epano Phournos, the principle on which this tholos was constructed was perfectly sound; it is the instability of the material employed which has caused its collapse. The actual limestone slabs here used are not very sound and crack under pressure. This can be well seen in the inner jambs of the doorway where the angle-blocks have cracked under the weight of the superincumbent masonry, and then the lateral thrust of the whole mass has caused them to bulge inwards in a very dangerous manner (Fig. 56). During the excavation we strengthened these jambs with cement and fresh stone as far as possible, and at the close inserted a stout timber brace between them in an attempt to prevent any further extension of the bulge.

The average level of the floor of the tholos, which was simply the native rock, is slightly higher than that of the doorway. Just inside the doorway there is a broad shallow pit about two metres wide and four long, cut out in the rock, and about .75 m. deep. It follows the lines of the doorway, but was lined with big blocks of stone packed tight with yellow clay, of which only four or five still remain *in situ*. We found many other similar blocks just inside the doorway which would have served either to line this pit or to roof it. This was probably a grave-pit and may be compared with a pit found just in the doorway of the Vaphio tomb.<sup>1</sup> On the rock in this pit we found Hellenistic pottery mixed with

<sup>1</sup> Tsountas, 'Εφ. Ἀρχ. 1889, p. 140.



Geometric and L.H. II. and III. wares, thus shewing that the tomb had long since been plundered. Elsewhere within the tholos, particularly in the northern sector, Hellenistic sherds lay close to the floor, and here and there against the wall large rectangular blocks of poros.<sup>1</sup> It is thus probable that in Hellenistic times the tomb was still standing, or at any rate, if it was not generally accessible, it was dug into and disturbed. In the western sector we found a layer of fine earth some twenty centimetres thick above the rock, which contained many fragments of L.H. II. pottery, especially of the fine Palace style amphorae described below, and a few fragments of gold foil and other objects, which hint at the original richness of the funereal deposits.

Above the floor of the tholos was a thick layer of fallen stone about two metres deep, which probably represents the original collapse of the dome. On this at certain points, especially just within the doorway to the west, and in the north-eastern sector, we found a thick layer of wood ash<sup>2</sup> in which olive kernels were of frequent occurrence. It is probable that after the dome had first fallen in the partially ruined tomb served as a shelter for shepherds, outlaws or others having work in the neighbourhood. The sloping walls of the tomb gave protection against rain and wind, which at Mycenae blows most often from the north. Those who thus sheltered in the ruined tomb would have sat round their campfires eating bread and olives, the kernels of which they threw in the ashes. Above this layer of wood ash there was another heavy mass of stone and earth reaching to the top of the wall still standing. This probably represents another collapse of the upper masonry of the tomb as well as the gradual accumulation of earth brought in by rain, and the stones thrown into the hollow by cultivators from the surrounding fields.

In the excavation we found a number of miscellaneous small objects and a very great quantity of broken pottery. The following is a brief account of them.

<sup>1</sup> These may have been the remains of a bench running round the base of the wall of the tholos. One of the tholoi at Dimeni had such a bench, but of crude brick, and a chamber tomb at Mycenae had a bench of hewn slabs of poros running round all four sides: Wace-Thompson, *Prehistoric Thessaly*, p. 82; Tsountas-Manatt, *Mycenaean Age*, p. 136.

<sup>2</sup> See Section A-B in Pl. XLVI.

*Finds.**A. Miscellaneous.**I. The Dromos.*

In the excavation of the dromos the following objects were found in the débris before the doorway at a height of a metre or more above the level of the floor.

Boar's tusk, .022 m. wide, .04 m. long (Fig. 57, *a*), cut into an oblong and pierced through the under side of the edge at both ends for sewing on to a leather backing, probably the cheek-piece of a helmet; a discussion of this type of helmet will be given in connection with Tomb 518.

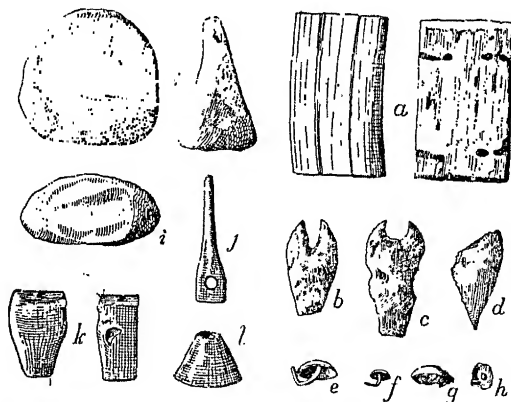


FIG. 57.—TOMB OF AEGISTHUS: SEAL IMPRESSION (*i*), ARROWHEADS (*b-d*), AND OTHER SMALL OBJECTS. (Scale 1 : 2.)

Steatite pendant in the form of a bull's or lion's head, .02 m. long; there is a small hole on the top of the head and another in the nose, as though it was to be pierced vertically for threading (Fig. 57, *k*).

Whorl, steatite of the usual pyramidal shape, height .01 m (Fig. 57, *l*).

The following were found on the actual floor of the dromos, and should therefore be taken as belonging to the actual contents of the tomb, whereas the other objects previously mentioned as being found at a higher level should be regarded as later in date than the tomb itself.

Ivory, four fragments of a group of two lions carved in high relief; they probably confronted one another in a heraldic attitude much as suggested in the restored sketch, Fig. 58; length of the three longest pieces, which join, .10 m.

Ivory, one or two fragments of dog's-tooth inlay and of plain narrow strips similar to the inlay from Tomb 518.

Obsidian, three arrowheads (Fig. 57, *b-d*); all are barbed but not tanged; the barbs are short and curved, the length when complete was at least  $\cdot 035$  m. One of these was found in the drain.

Carnelian bead, one small example, rough and unpolished like those from the Treasury of Atreus<sup>1</sup> and Tomb 517: diam.  $\cdot 006$  m. (Fig. 57, *h*).

Gold, three small nails or studs; two are  $\cdot 005$  m. in diameter, and the third  $\cdot 01$  m. (Fig. 57, *e, f*).

Gold, head of a bronze nail or stud,  $\cdot 009$  m. in diameter (Fig. 57, *g*).

Gold foil or leaf; a fair quantity, undecorated, except for one very small piece, was found on the floor of the dromos, especially before the west pier of the doorway and in the drain; this probably comes from the gilding of wooden boxes and similar objects.

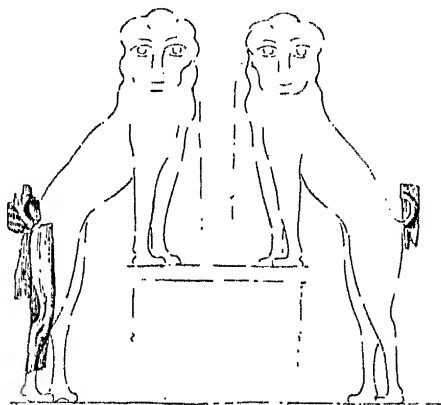


FIG. 58.—TOMB OF AEGISTHUS: RESTORATION OF CARVED IVORY RELIEF.  
(Scale 1 : 4.)

At the south end of the dromos, but above the floor level, was found a bronze coin of Heraea, *Rev.* H.; *Obv.*: helmeted head of Athena to right (cf. *B.M. Cat. Peloponnesus*, No. 24), fourth century B.C., diameter  $\cdot 014$  m. II. The Tholos.

In the excavation of the tholos the following small objects were found in the Mycenaean layer on the floor, and, except where noted, in the western sector already mentioned.

Amber bead, shaped like a flattened cone on both sides, diameter  $\cdot 015$  m.

Clay seal impression; the impression itself, which measures  $\cdot 03$  by  $\cdot 02$  m., is now too much worn to be made out. It is (Fig. 57, *i*) a lump of clay pinched in the fingers and pressed on a seal stone: found in the northern sector.

<sup>1</sup> See p. 355, Fig. 75 *o*, below: similar beads from the Tomb of Clytemnestra and Tomb of Genii, pp. 372, 383, below.

Head of bone awl (length .03 m.), broad flat top, pierced for passing a thread through (Fig. 57, j).

Gold leaf or foil, a small quantity, all undecorated, probably also derived from wooden boxes once covered with this material: among it are two small plain discs, pierced with one hole for suspension, diam. .01 m.

In the upper part of the fallen débris in the tholos were found a broken bronze pin and two small Greek copper coins, which unfortunately are too much defaced to be identified; they seem, however, to be of the Hellenistic age.

### B. Pottery.

#### I. The Dromos.

In clearing the dromos we found a great quantity of pottery of all periods, ranging from Middle Helladic to Hellenistic. The latter was principally found close to the surface at the south end of the dromos, and just outside it in connection with some ruinous walls and destroyed graves of this period. The Middle Helladic ware, which, as will be seen below, is very miscellaneous and includes practically all the different fabrics of this period, was found well mixed with L.H. I.-II. pottery, and was possibly already fortuitously scattered in the soil at the time the tomb was built. Then as earth found its way into the dromos, such sherds naturally came in with it; the great accumulation of earth above the side walls of the dromos must also not be forgotten. It must be remembered too that on the back of the ridge between the Tombs of Clytemnestra and Aegisthus and the Hellenistic gymnasium a thick deposit of Middle Helladic wares was found by a trial trench in 1920 in a dip in the rock. This deposit seemed to have been disturbed, and had possibly been cleared away from the citadel during some rebuilding and levelling process such as that which occurred at the beginning of L.H. III., early in the fourteenth century B.C. The comparative frequency of M.H. wares in the dromos of this tomb might therefore be due to some similar circumstances, and might even be part of this deposit which had trickled down the hillside. At all events it is one more piece of evidence, if any further were needed, that Mycenae was already a flourishing town in Middle Helladic times, *circa* 2000-1600 B.C.

#### *Middle Helladic.*

This pottery, which is, of course, of no use for fixing the date of the tomb, may be classified thus:—

- A. Minyan ware: not much was found and none of the pieces are large. The usual shapes are represented (see *Korakou*, pp. 15 ff.), the goblet naturally being the commonest. Nearly all is of the grey type, but there are three or four pieces of the so-called Argive Minyan variety.
- B. Matt-painted ware: Group B. 1 (*Korakou*, pp. 19 ff.): a considerable quantity was found, but it need not all be of Middle Helladic date, for, as shewn by Blegen (*Korakou*, p. 44), this group lasts into L.H. I. One piece has been mended with a leaden rivet.
- Group B. 2 (*Korakou*, pp. 24 ff.): not much was found and all is much broken; the shapes and patterns resemble those from *Korakou*.
- Group B. 3 (*Korakou*, pp. 28 ff.): not much was found, but one or two of the pieces though small are of very good quality, as the clay is well refined, the surface is polished, and the bichrome decoration is carefully done.
- C. Light-on-dark ware; Group D. 1: one small piece with characteristic pattern was found (Pl. XLVIII. *m*); cf. *Korakou*, Pl. II.
- D. Plain ware: a considerable quantity of undecorated pottery was found which, from its rather heavy fabric, smooth polished surface and imitation of Minyan shapes, is undoubtedly of the Middle Helladic period. It corresponds well with pottery from the lower strata of the Pithos Area in the Palace, both as regards technique and the forms of the vases; see pp. 173 ff., above.

#### *Late Helladic.*

At all depths in the soil excavated from the dromos, great quantities of Late Helladic pottery were found. Of the three classes L.H. I. and II. are commoner than L.H. III., and therefore must be considered as representing the wares that were contemporaneous with the building of the tomb and its use. In many cases sherds, especially of the large Palace Style amphorae (L.H. II.), were found to join sherds from the tholos. As the pottery from the tholos would *a priori* seem to have been laid down on the floor of the tomb when it was first used, the fact that fragments of vases from the tholos and dromos join indicates that in all probability a good deal of the dromos pottery, in particular the amphorae, can be considered as having properly belonged to the tomb. It would have been removed from the tholos either during preparations for secondary interments or by plunderers who robbed the tomb at a much later date after the fall of Mycenae. Some of the fragments described below were found trodden into the floor of the dromos, and should therefore be considered as being some of the earliest vases in the tomb. They

also shew that in respect of this tomb L.H. I.-II. pottery is earlier than Middle Helladic wares, which came in later, as the earth accumulated in and above the dromos.

*Late Helladic I.*

It is not always easy to separate out the L.H. I. sherds from the L.H. II. pieces, especially as the pottery is much broken, and there are no whole vases, but the more characteristic L.H. I. specimens can be tabulated thus:—

1. Tall narrow-necked jars with three loop handles on the shoulder: two or three vases of this shape were found in the First Shaft Grave (Furtwängler-Loeschcke, *Myk. Thongefässe*, Pl. III. (10, 11)), and there is one example from Tomb 518 with a double-axe pattern. The patterns in use here are, (a) double-axes (Pl. XLVII. h), as in the examples from the First Shaft Grave and another from Tomb 518; (b) regular thick waved lines alternating with rows of dots (Pl. XLVIII. d, i), resembling *Korakou*, Figs. 64, 65, and the large Palace Style amphora described below (Pl. L. b); (c) rough swastikas alternating with continuous rows of dots (Pls. XLVII. j, XLVIII. e).

2. Teacup shape: compare the fine specimens from Tombs 518 and 529 and *Korakou*, Fig. 51, Nos. 2, 3, 7, 8. The patterns are: (a) double-axes (compare one of the specimens quoted from Tomb 518, and another from Tomb 516), and (b), more frequently, spirals connected tangentially; the centres of the spirals are solid and both the tangent lines and the ribands bordering the design at top and bottom are often decorated with discontinuous rows of dots in added white paint.

3. Cups of the Vaphio or Keftiu shape; compare *Korakou*, Pl. IV. Nearly all specimens have a raised plastic band round the middle of the body, a reminiscence of the metal technique.<sup>1</sup> The patterns used are: (a) spirals joined tangentially (Pl. XLVII. n), (b) ripple or grained wood pattern<sup>2</sup> (Pl. XLVII. p), (c) conventional foliate spray (Pl. XLVII. l, o; cf. *Korakou*, Fig. 54), (d) dots, and (e) an unusual pattern, possibly part of a double-axe design (Pl. XLVII. m). The base is usually ornamented with an elegant spiral.

4. Rhyton of funnel type: only two pieces, see Pl. XLVII. b, c: the small fragment with added white seems to be the earlier.

5. One-handled goblets of a type derived from the Yellow Minyan goblet; see *Korakou*, Figs. 56, 57, and compare the chequer-pattern goblet from Tomb 518.<sup>3</sup> The patterns as far as can be distinguished seem to have consisted

<sup>1</sup> e.g. Schliemann, *Mycenae*, p. 314, Fig. 476.

<sup>2</sup> Cf. Bosanquet-Dawkins, *Unpublished Objects from Palaikastro*, p. 24, Figs. 13, 14: the pattern as there suggested is probably derived from wood or stone and not a reminiscence of the neolithic ripple, *J.H.S.* 1903, p. 160; cf. Evans, *Palace of Minos*, I. p. 593.

<sup>3</sup> This shape is not to be confused (as in *J.H.S.* 1923, p. 89) with one from Crete (e.g. Bosanquet-Dawkins, *op. cit.* Pl. XVII., b, p. 34; Boyd-Hawes, *Gournia*, Pl. VIII.), for the mainland vases have a slender, solid stem, whereas the Cretan vases have a wide, hollow stem and a hole in the base.

principally of earlier versions of a waved-line design like *Korakou*, Fig. 64, and the fragment of a beaked jug from Tomb 516.

6. Hole-mouthed or bridge-spouted jars; compare the fine example from Tomb 518; this shape is rare on the mainland (*Korakou*, pp. 34, 42), and is specifically Cretan.<sup>1</sup>

The fragments are too small to give any definite pattern.

7. Shallow spouted bowls with the sides splaying outwards, and as a rule decorated with a pleasing pattern of plants like *Korakou*, Fig. 52, 2. See Pl. XLVIII. *h, j*.

8. Small shallow bowls with foliage designs, like the specimen from the East Lobby of the Staircase in the Palace, p. 158, Pl. XXIII. *e*.

Though this pottery is of good fabric and style, yet the vases are so much broken and the fragments so small comparatively that there is little that repays illustration. The number of pieces that can be joined together is remarkably small.

Other interesting pieces include a few sherds of a fine open-mouthed jar with a raised base, which were found trodden into the floor of the dromos, and are of typical L.H. I. style (Pl. XLVII. *k*), and four other fragments. Of these latter, one (Pl. XLVIII. *g*) is part of a large jar which in style and from the use of added white recalls the splendid vase found by Seager at Mochlos,<sup>2</sup> and one from the first tholos of Kakovatos.<sup>3</sup> The third piece (Pl. XLVII. *i*) is probably from the neck of a large jug of metallic shape resembling the fine series from Tomb 518; there are several other similar fragments, many of which also are decorated with added white. The fourth piece is shewn on Pl. XLVIII. *f*.

Generally speaking, the L.H. I. pottery is of good quality, but it is so broken and contains so few whole vases that it does not afford much ground either for comparison or discussion. It resembles the vases of the First Shaft Grave, from which it cannot be far removed in point of date, and it should be noted that added decoration in white is fairly common, but far from universal. Also very few vases are painted inside in the Cretan style, as illustrated specially in the Zakro pottery.<sup>4</sup> Shapes like the one-handled goblets of a Minyan type are found side by side with hole-mouthed jars, which are a typically Cretan shape rare at Mycenae and elsewhere on the mainland. These considerations seem to hint that even by the end of L.H. I. the native tradition of the mainland as exemplified in the shapes and patterns derived from the earlier Minyan

<sup>1</sup> Cf. Bosanquet-Dawkins, *op. cit.* p. 69, Form 23.

<sup>2</sup> Maraghiannis, *Ant. Crétoises*, II. Pl. XIV. 2; *A.J.A.* 1909, Pl. 6.

<sup>3</sup> *Ath. Mitt.* 1909, p. 316, Fig. 16.

<sup>4</sup> Bosanquet-Dawkins, *op. cit.* pp. 24, 27; *J.H.S.* 1903, p. 251.

and Matt-painted wares had already begun to influence the imported Minoan style, and was tending to create a distinctive Mycenaean type.

*Late Helladic II.*

The L.H. II. pottery may be divided into two main groups. The first (A) consists of a large number of fragments of amphorae of the so-called Palace Style. At least seven separate vases can be recognised:—

1. A large amphora <sup>1</sup> decorated with belts of the so-called sea-anemone pattern; a reconstructed drawing is given in Pl. L. *b*, and it will be seen that it is almost identical with one of the vases from the first tholos tomb at Kakovatos, *Ath. Mitt.* 1909, Pl. XVIII. 1.

2. A large vase with a pattern of big, almost skeleton ivy-leaves on a spotted ground; this closely resembles another vase from the first tholos at Kakovatos, *Ath. Mitt.* 1909, Pl. XVIII. 2, and there are two similar vases from the second Kakovatos tholos, *Ath. Mitt.* 1909, Pl. XIX.

3. A large amphora <sup>2</sup> with a most graceful pattern of palm-trees alternately tall and short. Between the palm-stems tall grasses spring up waving in the winds between the trees, Pl. XLIX. *a, b, d*. This is like but much superior to a vase from the second tholos at Kakovatos, *Ath. Mitt.* 1909, Pl. XXII. 2.<sup>3</sup>

4. A considerable number of pieces from a very big vase decorated with spiral bands running round the body; this is very like the vase from the first tholos tomb at Kakovatos, *Ath. Mitt.* 1909, Pl. XVII., except that in our example the diamonds between the zones of spirals are plain and the centres of the spirals contain volute ornaments instead of stars. The style and fabric are not good.

5. A few pieces of an amphora with an ivy-leaf pattern like the fine specimen from the first tholos at Kakovatos, *Ath. Mitt.* 1909, Pl. XXIII. 2. This vase was very large and of reasonably good fabric, see Pl. XLIX. *c*.

6. A few pieces of an amphora with a pattern of double-axes, but there is not enough to attempt any restoration of the design.

7. A considerable number of pieces of an amphora with a complicated floral pattern not unlike that of a vase from the first tholos at Kakovatos, *Ath. Mitt.* 1909, Pl. XXII. 1. The style, paint and fabric of this example are bad and it is in poor condition. A few of the better pieces are shewn in Pl. XLIX. *e-i*.

There are several other pieces of Palace Style amphorae and four of the better sherds are shewn in Pls. XLVII., XLIX. Of these two (Pl. XLVII. *a, d*) come from vases with marine designs, and compare with the octopus amphora from Tomb 529. The two remaining pieces in their decoration

<sup>1</sup> Some pieces of this were found in the tholos.

<sup>2</sup> Some pieces of this were found in the tholos.

<sup>3</sup> Cf. the fragments from Mycenae, Furtwängler-Loeschcke, *Myk. Vasen*, Pl. XXV.



(Pls. XLVII. *f*, XLIX. *j*) suggest the vase from Tomb 102 at Mycenae found by Tsountas, and published by Bosanquet, *J.H.S.* 1904, Pl. XIII.<sup>1</sup>

B. Another group consists of the smaller vases which can be tabulated thus :—

1. Teacups with spiral patterns; a few pieces seem to be of L.H. II. date, but the shape is rare in this period.

2. Cups of the Vaphio or Keftiu shape, similar to those of the L.H. I. period and with similar patterns, but inferior in style; contrast *Korakou*, Figs. 53 and 62.

3. One-handed goblets derived from the well-known Minyan type, see above, pp. 307 ff. Several specimens have the stippled or thrush-egg pattern, and some are painted also on the inside in the Cretan manner.

4. Shallow spouted bowls usually decorated with the thrush-egg pattern.

5. Alabastra, very fragmentary, but a common shape: the patterns resemble those of the specimens from Tombs 515 and 518. Examples with vertical sides are rare. Among these pieces one or two might perhaps be classed as L.H. I.

6. Small saucers of a metallic type with loop handles on the rim; there are good examples from Tombs 516, 517, 518 and 529. The patterns are: (*a*) belt of three lines with continuous rows of dots above and below (Pl. XLVII. *q*), (*b*) ivy leaves (Pl. XLVII. *r*), (*c*) caper design (Pl. XLVII. *u*) like the alabastron and jar from Tomb 529, (*d*) waving foliage (Pl. XLVII. *s*, *t*); compare *Korakou*, Fig. 72.

7. Shallow rounded bowls with heavy rims and painted inside and out in the Cretan style. Fragments of three were found. Three pieces come from one bowl painted with elaborate rosette devices both in and out (Pl. LII. *b*).<sup>2</sup> A smaller fragment also with pattern both inside and out seems to have had a marine design (Pl. XLVII. *w*). The remaining piece was apparently decorated on the outside like the first-mentioned fragments, but within is merely covered with black glaze paint (Pl. XLVII. *v*). These fragments are so unusual among Mycenaean pottery that it is quite probable that they are actual importations from Crete.

A few other pieces of typical L.H. II. ware that do not fall under the shapes given above are seen in Pl. XLVIII. *a-c*. They are most probably pieces of large jugs or jars of a metallic form. It may be particularly noticed that two pieces (one is Pl. XLVIII. *c*) are obviously from the neck of a jug like *Korakou*, Pl. V., which is an imitation of a metal prototype.

C. A third group of L.H. II. pottery is made up of a considerable number of pieces of Ephyræan ware, which, since Blegen's separation of it as a distinct class of Mycenaean pottery,<sup>3</sup> must be regarded as the most characteristic L.H. II. ware of the mainland. The shape is the usual two-handled goblet on a low

<sup>1</sup> This vase is of mainland and not of Cretan fabric.

<sup>2</sup> For the general character of the design cf. Bosanquet-Dawkins, *op. cit.* p. 46, Fig. 35.

<sup>3</sup> Blegen, *Korakou*, pp. 54 ff.

foot, which is a refinement of the earlier Minyan goblet, and is decorated in the usual manner with simple but delicate floral or marine devices on front and back, and with the very characteristic quirks beneath the handles. The patterns represented here are: (a) argonauts (Pl. XLVIII. l), compare *Korakou*, Fig. 76 and Pl. VI. 1; (b) iris or lily (Pl. XLVIII. n, o), *Korakou*, Fig. 77 and Pl. VII. 1; (c) rosettes (Pl. XLVIII. k), *Korakou*, Fig. 75 and Pl. VI. 2. There are also two or three pieces from undecorated goblets of the Ephyræan shape covered with plain black-brown paint inside like the two specimens from Tomb 517.

D. A considerable amount of plain pottery of rather fine fabric was found which can be considered as a separate group. This corresponds to the unpainted ware of good technique of both L.H. I. and II. found by Blegen at *Korakou* (see *Korakou*, pp. 43, 57). It is not possible to distinguish here how much of this should be regarded as L.H. I. and how much as L.H. II. All we can say is that it falls within both periods and probably covers the end of one and the beginning of the other. The following shapes can be recognised: (a) goblets on low feet, with one or two handles, cf. *Korakou*, Fig. 58; (b) cups of the Vaphio or Keftiu shape with raised metallic bands round the middle, cf. *Korakou*, Fig. 54; (c) small dippers (cf. *Korakou*, Fig. 26), sometimes with studs at the base of the handle, shewing again the imitation of metal; (d) shallow bowls, the forerunners of the type common in the deposit under the floor in the room north of the West Portal in the Palace, see p. 218 above. Finally, among coarse ware which can be assigned either to L.H. I. or L.H. II. are five bases bearing potter's marks. The first has a nick on the edge with  $\sqcap$  below, the second has a nick on edge with  $=$  below, the third has this mark  $\cdot - \cdot$ , the fourth a  $\gamma$  sign, and the fifth three notches on the edge. Among other miscellaneous plain ware of the L.H. period are about ten pieces of handleless cups of the well-known type often referred to in this report<sup>1</sup> as running from the end of L.H. I. to the beginning of L.H. III. Cups of this type were very common below the Palace floors, see pp. 150, 218, 259, above.

### *Late Helladic III.*

A certain amount of pottery of this period was found in the dromos well mixed with that already described above, but in proportion to the L.H. I. and II. wares the total quantity is very small. The pieces are much broken; there are no whole vases, indeed there are hardly two sherds that can be fitted together, and the quality and condition are not good. These sherds, in fact, have every appearance of having found their way in with the soil that was gradually accumulated in and over the dromos so as to block it ultimately. The patterns so far as recognisable are of the usual types; kylikes, mugs and deep bowls<sup>2</sup> are the commonest, and there are fragments of four female

<sup>1</sup> e.g. *B.S.A.* XXIV. p. 208.

<sup>2</sup> Furtwängler-Loeschcke, *Myk. Vasen*, Pl. XLIV. 76, 84, 96.

terracotta figurines; but the miscellaneous and nondescript character of this pottery forbids us to draw any conclusions from its presence here, other than that it percolated casually into the dromos and forms no part of the offerings made at the tomb.

### *Hellenic and Hellenistic Ware.*

Over the south end of the dromos and just outside it a certain amount of later Greek pottery was found. There is only one small piece of Orientalising ware, while all the rest is late Hellenic or Hellenistic. This includes lamps with narrow openings on top and one pierced knob on the side, tear-bottles of the ordinary type, the neck of a *lagynos*, some fragments of very poor black-glazed and red-figured ware, a little brown glazed pottery of the third or second centuries B.C., and several small two-handled mugs of plain red ware. With these can be grouped a tall two-handled cup of plain red ware which was found in a grave probably not earlier than the second century B.C., just to the south of the dromos, with an iron pin and an iron strigil. The cup has a high turned stem and twisted loop handles, and is Middle Victorian in appearance.

There was also part of a curved roof-tile stamped on the inside ΘΕΡΣ - - -.

### II. The Doorway.

Seeing that the soil in the doorway had been disturbed almost to the floor level in digging the foundations for the masonry column put in by the Greek Archaeological Service to support the cracked inner lintel slab, it was not to be expected that any good stratification would be found there. Further, the presence of Hellenistic pottery low down in the doorway and on the rock floor of the tholos itself seems to indicate that the tomb had been dug into in late Greek times. The tholos may have been still standing at the time. The pottery found ranges from M.H. to Hellenistic, and can be classed thus:—

- M.H. Matt-painted, Group B. 1, one sherd.
- L.H. I., two pieces.
- L.H. II., three pieces from a Palace Style amphora; and three sherds of Ephyraean ware.
- L.H. III., eighty-four pieces, including samples of most of the usual shapes and patterns.
- Proto-Corinthian, two pieces.
- Hellenistic, ten fragments.

### III. The Tholos.

The collapse of the tholos naturally brought into it a mass of earth which contained potsherds of different periods from the sloping hillside above. Such sherds falling down with a mass of loose stone-work would

be apt to penetrate quite deep within the tomb. Thus there was no natural stratification of the deposit within the tholos. As already stated above, in the western sector a layer of fine earth about .20 m. thick was found containing many fragments of Palace Style amphorae and other Mycenaean pottery as well as pieces of gold-leaf, etc. The northern sector and also the pit just within the doorway yielded a good many more pieces of L.H. I. and II. ware, though mixed with Hellenistic fragments. In the lower levels practically all the pottery found was L.H. I., L.H. II. or Hellenistic, with one or two pieces of Geometric ware. In the upper levels pottery of all kinds was met with, principally Middle Helladic, L.H. III. and late classical wares. This pottery from the upper part of the débris had naturally fallen in with or after the collapse of the peak of the dome, and therefore has no bearing on the date of the tomb, which can only be determined by the vase fragments found on or near the rock floor itself.

### *Finds.*

#### *A. Pottery.*

The pottery found is as follows:—

Middle Helladic: this was found at all depths and comprises nine Minyan sherds, including one of the so-called Argive style, twenty-four sherds of Matt-painted Group B. 1, six of Matt-painted Group B. 2, five of Matt-painted Group B. 3, and a few pieces of plain polished ware of the ordinary Middle Helladic style.

Late Helladic I.: the following shapes occur:—

1. Cups of the Vaphio or Keftiu shape, see *Korakou*, Figs. 53, 54: an interesting piece with a fine ripple or grained pattern is shewn in Pl. XLVIII. *bb*, and also three good pieces with the hatched leaf or tennis-racket pattern, Pl. XLVIII. 2, *aa*, *cc*.

2. One-handled goblets (see *Korakou*, Fig. 56, 57), a very few pieces.

3. Teacups with spiral patterns and occasionally added white: not more than half-a-dozen pieces; see *Korakou*, Figs. 51, 2, 3.

No other shapes can be recognised, but the fragments seen in Pl. XLVIII. *s*, *t*, *x*, *y*, illustrate interesting additional patterns. Pl. XLVIII. *x*, *y*, give two small fragments shewing combinations of spirals and dots: the latter has traces of added white paint, and the former is painted with black glaze on the inside in the Cretan manner. The hatched leaf or tennis-racket pattern<sup>1</sup> is especially common among the few L.H. I. sherds and an interesting variety is given by two pieces, Pl. XLVIII. *s*, *t*, where the leaves are curved

<sup>1</sup> Cf. *Ath. Mitt.* 1909, Pl. XXIII. 1, p. 314.

and arranged like the blades of a propeller. Otherwise there is little or no pottery which is distinctive of L.H. I., and it must be admitted that except for the comparative frequency of the hatched leaf pattern, L.H. I. pottery is rare within the tholos.

Late Helladic II. : this falls into two main classes, the large amphorae of the so-called Palace Style and the smaller vases.

A. Palace Style amphorae: pieces of at least thirteen separate amphorae can be recognised, and there are many other pieces which seem to shew that the number was originally much greater.

1. Large amphora decorated with pendant festoons of trifoliate buds hanging from continuous rows of large dots, Pl. L. *a*. Similar patterns occur on an 'amphora from Mycenae,'<sup>1</sup> an amphora from Tyllissos in the Candia Museum (but with addition of marine motives), a rhyton from Palaikastro,<sup>2</sup> and fragments of a large amphora from the first tholos at Kakovatos<sup>3</sup> and the Acropolis at Athens.<sup>4</sup>

2. A few pieces of an amphora decorated with belts of double-axes which are ornamented with added white paint. Pl. XLVIII. *g*.

3. Not many pieces of an amphora with a pattern of belts of haftless double-axes with wavy lines and dots inserted between the blades. Pl. XLVIII. *φ*.

4. Two pieces of a rather smaller amphora decorated with a fine design of marine rockwork and zoophytes. Pl. XLVIII. *u, v*.

5. Part of a large amphora with a pattern of plants with hatched leaves very closely resembling a vase from the first tholos at Kakovatos, *Ath. Mitt.* 1909, Pl. XXIII. 1.

6. A few fragments of an amphora which probably had a pattern like a vase from the first tholos at Kakovatos, *Ath. Mitt.* 1909, Pl. XVIII. 1, but there are not enough pieces to determine the design with any accuracy.

7. Very few pieces of a vase that was probably decorated with a pattern similar to that of one of the amphorae from the first tholos at Kakovatos, *Ath. Mitt.* 1909, Pl. XVIII. 2.

8. Parts<sup>5</sup> of an amphora with a design of waving foliage and large flowers (Pl. LI. *c, d*) resembling that of an amphora from the first tholos at Kakovatos, *Ath. Mitt.* 1909, Pl. XX. 2.

9. A good many pieces<sup>5</sup> from a large amphora which had a pattern very similar to that of one from the first tholos at Kakovatos, *Ath. Mitt.* 1909, Pl. XXI., with a graceful waving design of variegated foliage. Pl. LI. *c*.

10. A considerable number of pieces from an amphora with waving foliage

<sup>1</sup> *J.H.S.* 1903, p. 192, Fig. 10; 1904, p. 322.

<sup>2</sup> Bosanquet-Dawkins, *op. cit.* p. 53, Fig. 40; cf. the Phylakopi jugs, *B.S.A.* XVII. Pl. XI. 18.

<sup>3</sup> *Ath. Mitt.* 1909, Pl. XXIV. 6, p. 306.

<sup>4</sup> Graef, *Ant. Vasen v. d. Akropolis zu Athen.* Pl. 2 (44).

<sup>5</sup> Some of the pieces were found in the dromos.

and large flowers (Pls. XLV. *p*, LI. *b*) very like a vase from the first tholos at Kakovatos, *Ath. Mitt.* 1909, Pl. XX. 1.

11. Four pieces from a vase with a pattern similar to that of No. 6 above.

12. About seven fragments from a large vase with large rosette-like flowers and long leaves with small curling fronds (Pl. LI. *a*).

13. Many pieces of an amphora with a complicated ivy design somewhat like the pattern of a vase from the first tholos tomb at Kakovatos, *Ath. Mitt.* 1909, Pl. XXIV. 7.

Of the other fragments none are large enough to enable the patterns to be determined, but an interesting piece shewn in Pl. XLVIII. 1, probably belongs to the same vase as two pieces from the dromos,<sup>1</sup> since it also shews part of a pattern very similar to that of the amphora found by Tsountas in Tomb 102 at Mycenae and published by Bosanquet.

B. Smaller vases: there are very few pieces, and even these are very small and nondescript, and do not allow either shapes or patterns to be distinguished with any accuracy. They seem rather to be casual sherds that penetrated into the débris in the tholos. There are, however, several pieces from a tall vase similar to two from the second tholos at Kakovatos, *Ath. Mitt.* 1909, Pl. XXIV. 8, 9. The shape is common in Crete but rare on the mainland. A vase of this type was found in Tomb 518 at Mycenae.

Late Helladic III.: a considerable amount of miscellaneous ware of this period was found badly broken and of no special interest. The usual patterns and shapes seem to be represented.

Geometric: there are twenty-three miscellaneous fragments and a considerable part of a large deep bowl with horizontal band handles set just below the lip. Between the handles are short belts of a triple zigzag pattern. The body was covered with alternate belts of solid black bands and groups of three fine lines interrupted at one point by a zone of small diamonds with dots in their centres. This Geometric pottery is in all respects similar to other ware of this period from Mycenae, and falls into the same group as the Tirynthian Geometric ware, as already noted by W. Müller (*Tiryns*, I., p. 135 ff.).

Hellenic and Hellenistic pottery: there are not more than ten unimportant sherds of Orientalising ware, and the upper part of a rough archaic female figurine in terracotta. Later Greek fabrics include a certain amount of black glazed ware of late rather than early style, one minute piece of Attic black-figured ware, several pieces of Megarian bowls, and much miscellaneous Hellenistic pottery with brown or red glaze, and a few fragments of tear-bottles and lamps.

#### B. Miscellaneous.

Miscellaneous finds include a celt of green stone .065 m. by .05 m., a small, thin, flat piece of shale pierced at one end for suspension as a charm, two clay spools, a number of the ordinary pyramidal Greek loom weights, one of

<sup>1</sup> P. 310, above, Pls. XLVII. *f*, XLIX. *j*.

which is impressed about ten times with a stamp shewing a man marching forward and brandishing a spear, portions of a good archaic and a later antefix, and a painted archaic architectural fragment of terracotta probably from a cornice.

#### DATE.

This tomb, from the character of the façade and its general structure, is obviously posterior to the other tombs of the first group and anterior to those of the second group. The pottery from the tholos deserves to be considered first; here the L.H. I. ware is less than the L.H. II. and is akin to that of the First Shaft Grave, the latest of the six. In the dromos there is a slightly greater proportion of L.H. I., but in view of the M.H. ware both in the tholos and dromos, probably all the M.H. and some of L.H. I. ware (especially as there are so few sherds that join) percolated into the tomb after its disuse and collapse. Nor should the Hellenistic disturbance be overlooked. The L.H. I. ware indicates that the tomb was built and first used at the end of the L.H. I. period; the L.H. II. that it was still used in the next period, probably when the second façade was added. Thus the tomb can be dated to the end of the L.H. I. and the beginning of the L.H. II. period.

### 3. THE SECOND GROUP.

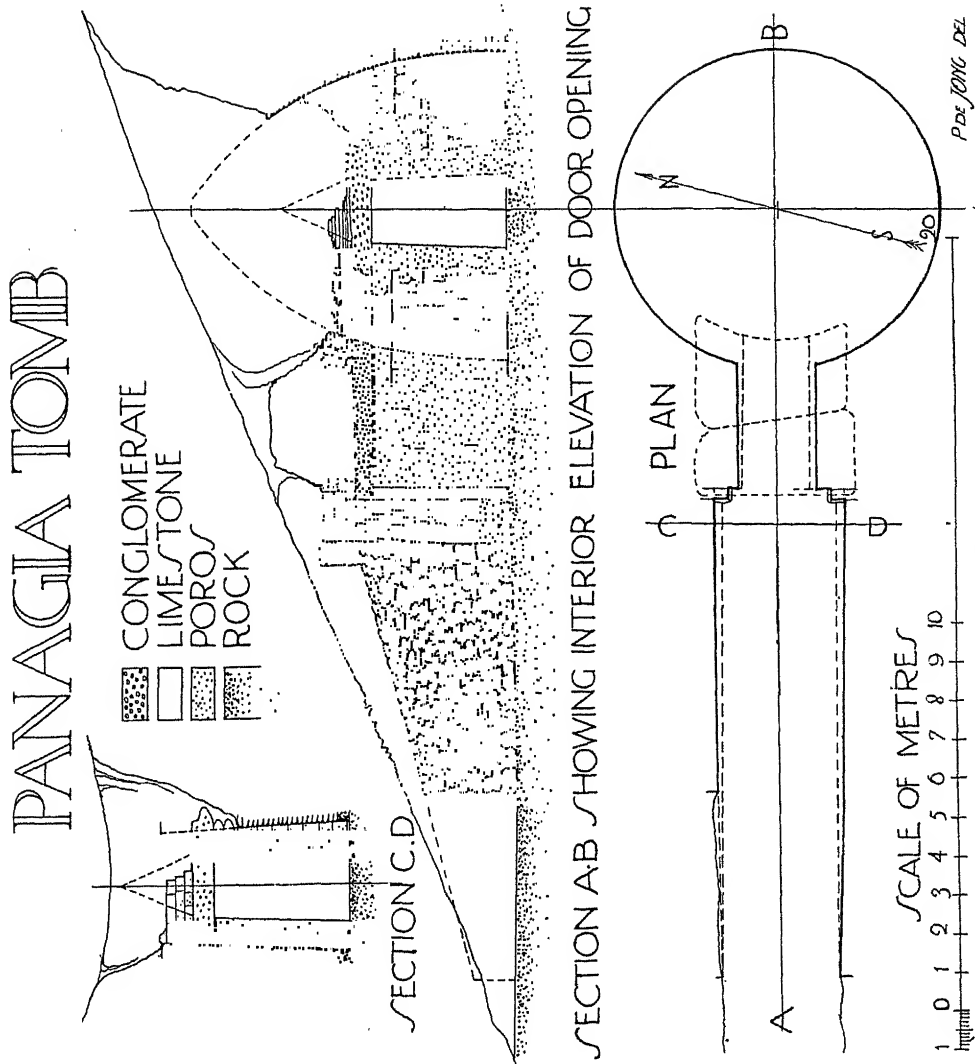
Of the second group of Tholos tombs the earliest is probably that known as the Panagia Tomb; it seems earlier than the Kato Phournos, and the Lion Tomb, as we shall see, is clearly the latest of the three.

#### A. THE PANAGIA TOMB (Figs. 59, 60).

The Panagia Tomb was discovered and excavated by Tsountas in 1887,<sup>1</sup> and in the following year he published a brief account of it, with a rough sketch plan, but as he had found nothing in it, no detailed account was ever issued. In 1922 we cleared the dromos and tholos of the earth that had fallen in since Tsountas' excavation, and also turned over the earth previously thrown out of the tomb in the hope of finding potsherds or other objects to assist in dating it.

The dromos (Fig. 60), which is 12 m. long and nearly 3 m. wide, is cut out in the earth and soft rock of the hillside, and lined with walls of

<sup>1</sup> *Πρακτικά*, 1887, p. 65; 'Εφ. 'Αρχ., 1888, pp. 121-2.





rubble masonry, which were once doubtless mortared with the usual tough yellow clay and are very carefully built. It is slightly narrower at the top than at the bottom. The west end of the north wall is destroyed, but otherwise the walls, which are crowned by a row of neatly adjusted slabs, are in good condition. This style of building approaches to within 1.13 m. of the façade of the tomb, where it stops abruptly, and its place is taken by good ashlar work in poros, resting on a conglomerate base two courses high. This ashlar work on each side is not bonded in with the rubble work but makes a clean joint against it, and thus appears more like an overlap of the façade than part of the dromos walls. It is possible that when the tholos and its façade were built the dromos was left unwallled except for the short stretch at the end on either side of the façade, and that the main part of the dromos was not lined with rubble masonry till the tomb was completed.

The doorway of the tholos (Figs. 59, 60) is built of conglomerate blocks laid in fairly regular courses, and is about 3.40 m. high, 2 m. wide and just over 3 m. deep. It is slightly narrower at the top than at the bottom, and is roofed with two large slabs of conglomerate. All the conglomerate work of the doorway is hammer-dressed, and there is not a sign anywhere of the use of a saw. The joints are covered with stucco as in the later façade of the Tomb of Aegisthus. The peculiar nicks which are visible at the ends of the inner lintel, and at the south end of the outer lintel, were probably intentionally so cut for fastening ropes when dragging the slabs into position; at all events they are artificial. As indicated in the section, the conglomerate lintel and jambs of the doorway actually formed part of the façade, but are framed with rectangular pilasters of ashlar work in poros which ran right up to the lintel to bond with the projecting cornice of poros above it. This is quite clear, although some of the poros work has now fallen away. The poros pilasters are dressed with hammer and chisel and set on roughly rectangular slabs which thus form primitive column bases. The lintel as shewn slightly overlaps the conglomerate jambs, and had a relieving triangle above it which was masked with rectangular poros blocks. This is the earliest tomb in which the existence of a relieving triangle is unmistakable, and it is interesting to observe that the lintel-blocks are far longer than those of any of the three tholoi discussed above. They overlap the side walls of the doorway by a considerable distance, in striking contrast to the lintel-blocks of the

Tomb of Aegisthus. The tholos itself is about eight metres in diameter, and, to judge by the inward curve of the wall, would have been about eight metres high. The walls are built with small slabs of rough limestone similar to those of the Tomb of Aegisthus, which it resembles in construction, except that this tomb is more carefully built. The method of laying the stones and of constructing the dome is the same as in that tomb. There is no grave-pit in the floor of the tholos, which consists merely of the native rock roughly levelled.

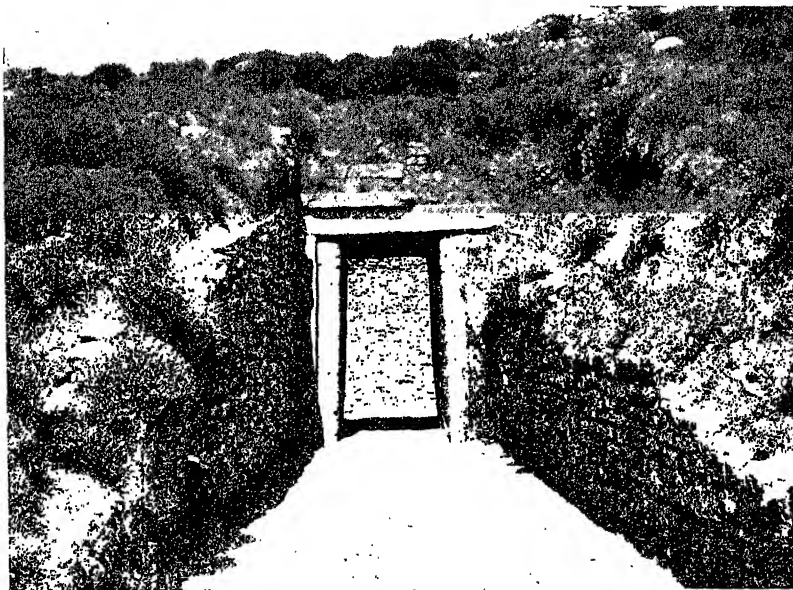


FIG. 60.—PANAGIA TOMB: DROMOS AND FAÇADE.

This tomb marks a slight advance on the Tomb of Aegisthus in one or two points, such as the ashlar work of the doorway, and the relieving triangle over the lintel. Further, the poros façade is similar to the second façade of the Tomb of Aegisthus, and the manner in which the poros pilasters are set to form a frame round the conglomerate jambs and lintel suggests the way in which the later or poros façade of the Tomb of Aegisthus was placed in front of the original rubble façade. From a comparison of these two tombs there seems little doubt that ashlar work is posterior to the rougher rubble masonry. The cumulative evidence of the two façades of the Tomb of Aegisthus and of the façade of this tomb

seems conclusive. We thus obtain two points of difference between the first and second groups, the use of ashlar work, and the introduction of the relieving triangle.

### *Finds.*

#### *Pottery.*

In clearing out the dromos and tholos we found a quantity of miscellaneous potsherds. In the dromos we found one M.H. piece and twelve sherds of L.H. II. ware, including the handle of a large amphora of the so-called Palace Style, and three Ephyraean sherds. There were one hundred and nine L.H. III. pieces, and sixteen fragments of Geometric and Classical pottery, of which the former predominated.

In the tholos we found one sherd of M.H. (Minyan) ware, sixteen pieces of L.H. II. and eighty-one pieces of L.H. III. pottery.

In turning over the earth thrown out by Tsountas we found one piece of M.H. (Matt-painted B.1) ware, and fifteen pieces of L.H. II. pottery, including two Ephyraean sherds. There were also one hundred and fifty-three pieces of L.H. III. pottery and eleven fragments of Geometric and Classical wares.

In the absence of any proof that any of this pottery belonged to the original deposits of the tomb, it would not be safe to draw any conclusions from it as to the date of the tholos. It is, however, remarkable that there was no L.H. I. pottery; but there were a fair number of L.H. II. sherds, and this might be taken as a hint that the tomb should not be dated later than this period, but in default of any other evidence no reliance should be placed upon it. The best criterion for dating the tomb is to be obtained from its architecture in comparison with that of the other tholoi.

### B. THE KATO PHOURNOS (Fig. 61).

This tomb, which had long been known,<sup>1</sup> since the doorway with its great lintels stands up conspicuously on the hillside like a dolmen, was excavated by Tsountas in 1893.<sup>2</sup> He published no account of his excavation, and seems to have found nothing of any importance in it except a considerable number of archaic Greek terracotta figurines of women (Athens, Nat. Mus. 3071). We re-examined the dromos and tholos in 1922, but time prevented us from cleaning the grave-pit in the latter.

The dromos (Figs. 61, 62) is 12 m. long by nearly 3 m. wide, and

<sup>1</sup> *Expédition de Morée*, Vol. II. Pl. 69, Fig. 11.

<sup>2</sup> *Πρακτικά*, 1893, p. 8.

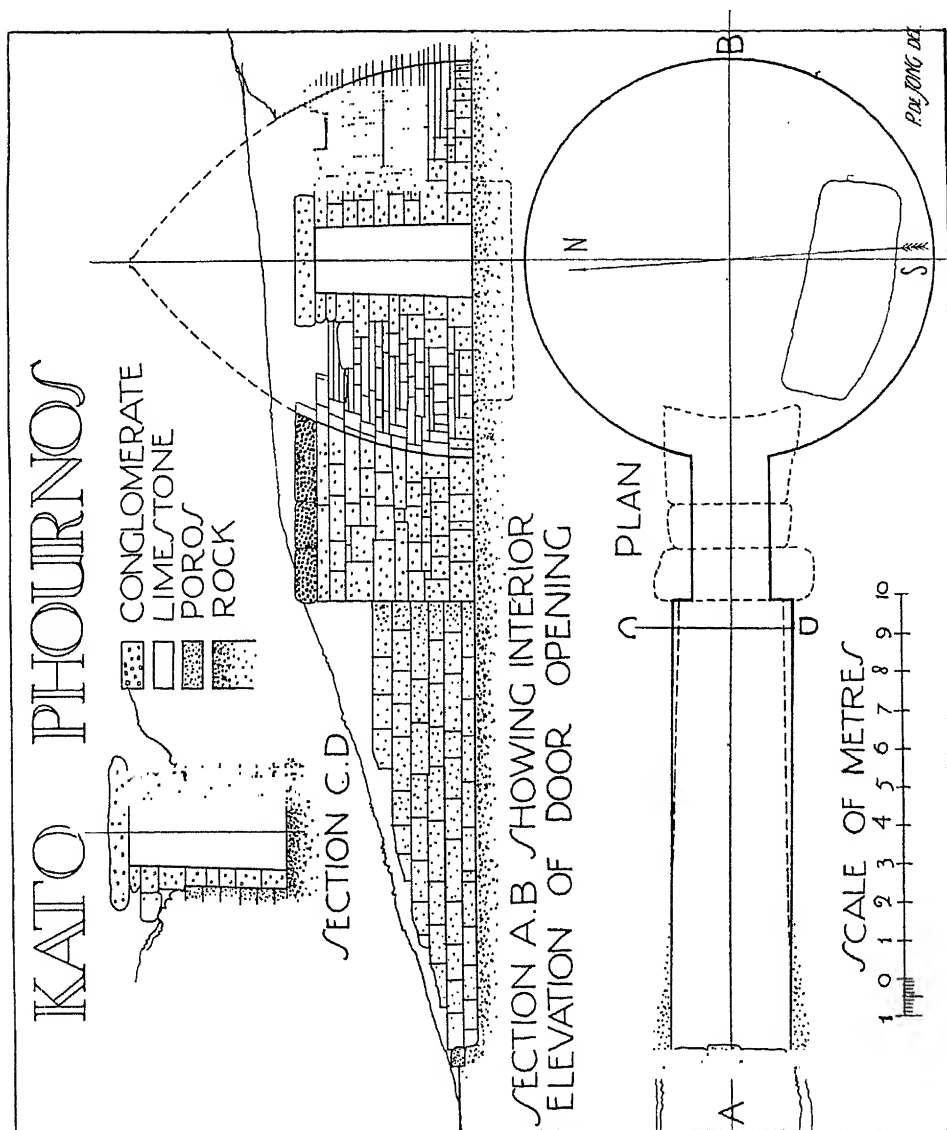
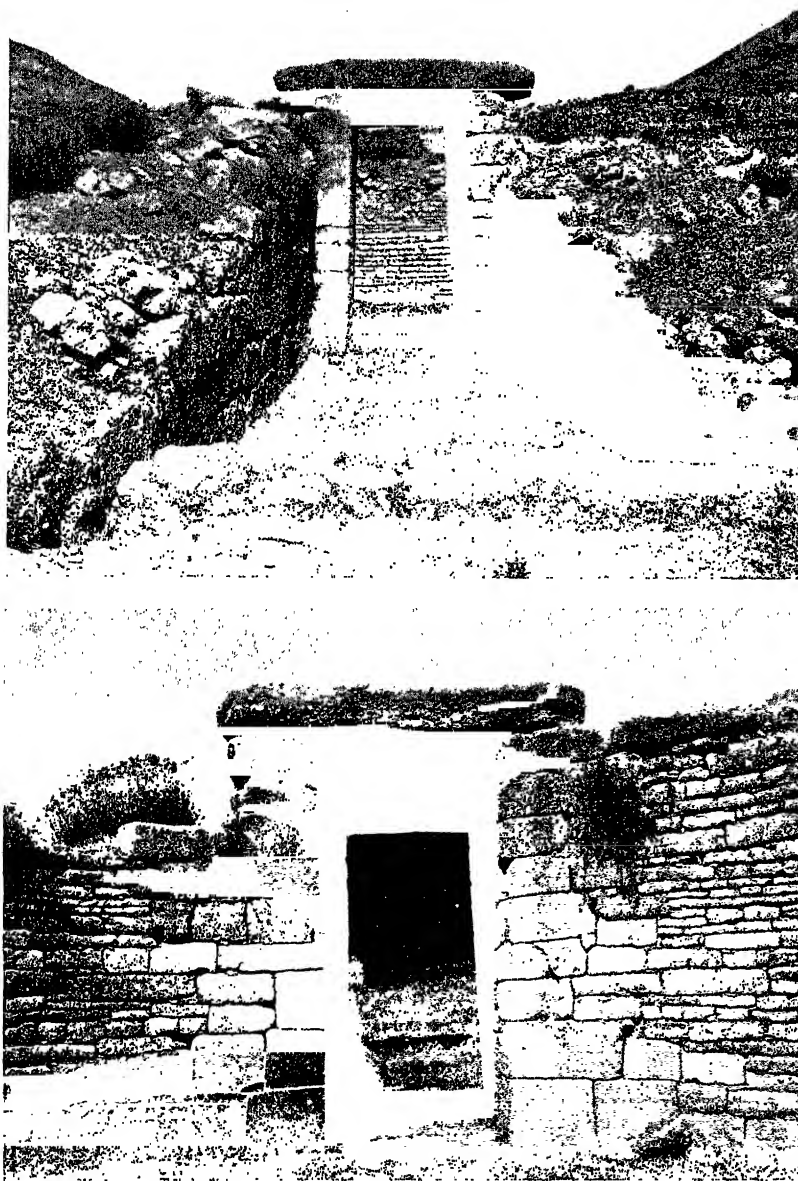


FIG. 61.

narrows slightly towards the top. Its entrance or west end is blocked by a wall of rectangular poros blocks now only one course high and one stone thick. The dromos walls are built throughout of good ashlar work in poros, of which some of the upper stones are now missing. The joints are pointed with stucco. The poros blocks are all dressed with hammer and chisel, and shew no trace of the saw. The doorway (Figs. 62, 63) is 2 m. wide and nearly 4 m. deep. It is about 4 m. high, narrowing towards the top, and is roofed with three big lintels of conglomerate. These overlap the side walls of the doorway very considerably, like the lintel-blocks of the Panagia Tomb, and so probably originally had a relieving triangle above them. The front of the doorway is flush with the front of the outer lintel, and there is consequently no frame or fascia round the door. The façade is thus very simple. The material used for the walls of the doorway is principally a fine-grained conglomerate, and all the blocks are hammer-dressed and the joints covered with stucco. There is no trace of the saw. The floor of the doorway like that of the tholos is cut out of the native rock and covered with a layer of cement.

The tholos, which was also floored with cement, is 10 m. in diameter; its height calculated by the inward curve of the walls was about 9 m. The upper part of the dome has long since fallen in, and the part still standing is nowhere more than 4 m. high. There is a foundation course of rectangular blocks of conglomerate for the wall, which itself consists of small slabs of limestone with a few conglomerate blocks inserted here and there. These slabs are built up on the same system as that employed for the walls of the Tomb of Aegisthus, but some attempt has been made to dress them to make them fit together better, and so make the tholos more stable. The upper part of the dome must have stood high above the ridge in which it is built. It was probably covered on the outside with a big mound of earth, for Stamatakes says there were such conical mounds over the Heraion Tomb and the Tomb of Clytemnestra.<sup>1</sup> This would have made it very conspicuous and so have contributed to its being plundered and destroyed. In the southern sector of the tholos there is a large grave-pit in the floor about 5 m. long, 2 m. wide and over 1 m. deep.

<sup>1</sup> *Ath. Mitt.* 1878, p. 272.



FIGS. 62, 63.—KATO PHOURNOS TOMB.

FIG. 62.—DROMOS AND FAÇADE.

FIG. 63.—DOORWAY FROM THE THOLOS.

*Finds.**Pottery.*

In the dromos we found seventeen fragments of large amphorae of the Palace Style (Pl. XLV. *c, g, i, k*), and two other fragments of L.H. II. pottery, both from small cups. There were also fifty miscellaneous L.H. sherds, largely L.H. III., and an archaic Greek terracotta figurine of a woman.

In the tholos we found two pieces of Palace Style amphorae, one of which clearly belongs to the same vase as several sherds found in the dromos (Pl. XLV. *j*), and another small fragment of a vase of L.H. II. Style. In turning over the earth thrown out by Tsountas we found sixteen fragments of Palace Style amphorae (Pl. XLV. *f, h*) and twenty-eight pieces of small vases of L.H. II. style. These latter include fragments with the ripple pattern and thrush-egg or stippled patterns, and pieces of alabastra like those from Tombs 515 and 518, as well as cups of the Vaphio or Keftiu shape. There were six fragments of plain ware, which to judge by their profiles (see *Korakou*, Fig. 59) are also L.H. II. There were sixty-one miscellaneous L.H. sherds, which are mostly of L.H. III. style.

The high proportion of L.H. II. sherds, especially the pieces of amphorae of the so-called Palace Style, which are in so many cases a feature of the tholos tombs, indicates clearly that this tholos should not be dated later than the Second Late Helladic period.

The sherds from this tomb, especially the pieces of the Palace Style amphorae, resemble very closely those found by Stamatakes in the Heraion tholos.<sup>1</sup> The lack of restraint in the designs, the desire to occupy all the ground with decoration, and the rather hasty technique shew that these cannot be grouped with the earlier and better specimens of the class. It is undoubtedly an error to suppose that all vases of the so-called Palace Style should be assigned to one brief period. Clearly, all the large vases of this type cannot have been manufactured at one time. They are, like Ephyraean ware, characteristic of the Second Late Helladic period, but like the Ephyraean vases<sup>2</sup> they begin at the end of L.H. I. and continue to the beginning of L.H. III.,<sup>3</sup> and thus would have been in use for at least a century. Again, like Ephyraean ware, these Palace Style amphorae are easily recognisable, and so valuable for chronological comparisons. Thus keeping in mind the fact that such amphorae do not belong to a short period, we shall probably not be far wrong in dating

<sup>1</sup> Furtwängler-Loeschcke, *Myk. Tongefässe*, Pl. XII.; see below, p. 337.

<sup>2</sup> Blegen, *Korakou*, pp. 54, 127.

<sup>3</sup> Cf. Müller, *Ath. Mitt.*, 1909, p. 320.

this tomb to the second half of L.H. II., or in other words to the later fifteenth century B.C.

### C. THE LION TOMB (Pl. LIII.).

This tomb was cleared by Tsountas in 1892,<sup>1</sup> and he seems to have found nothing of importance in it, since no detailed publication of it was ever made. Were-cleared the dromos and tholos in 1922, and the whole, like the other tholoi, was planned and measured by Mr. De Jong. The dromos (Fig. 64), which is about 5.40 m. wide and 22 m. long, is now in rather a ruinous condition. It is impossible to tell whether its walls were vertical or inclined slightly inwards towards the top. At its entrance or northern end it seems to have been closed with a low wall of poros, of which one stone is still *in situ* on the west side. The walls of the dromos are lined with good ashlar work in poros, but the stone is of poor quality and has split and decayed, and the walls have partially collapsed. The doorway is 2.60 m. wide, 5 m. deep and about 5.40 m. high, and is narrower at the top than at the bottom (Figs. 64, 65). It is built throughout of large rectangular blocks of conglomerate, which are all hammer-dressed and shew no trace of the saw. The floor cut out in the rock was covered with cement, and the joints of the side walls were pointed with stucco. It is roofed with three (originally four) great lintels of conglomerate. These overlap considerably the walls of the doorway and so almost certainly once had a relieving triangle above them.

The front or outer lintel-block, which is also of conglomerate, has fallen, and now lies in the dromos broken in two pieces. Its under-side shows two pivot-holes drilled out for the fitting of a door. Examination of the rock floor revealed (Pl. LIII.) a cutting in the rock for the bedding of a threshold immediately below the original position of this outer lintel-block. It deserves particular notice that in this, the earliest tholos to have a door, the threshold and consequently the door itself are placed right at the beginning of the doorway, instead of in the middle, as in the three tholoi of the third group, all of which had doors. From its position here it would seem that the fitting of a door to a tomb of this kind was still experimental. The façade of the door was formed by a veneer of ashlar work in poros set in front of the conglomerate of which the doorway

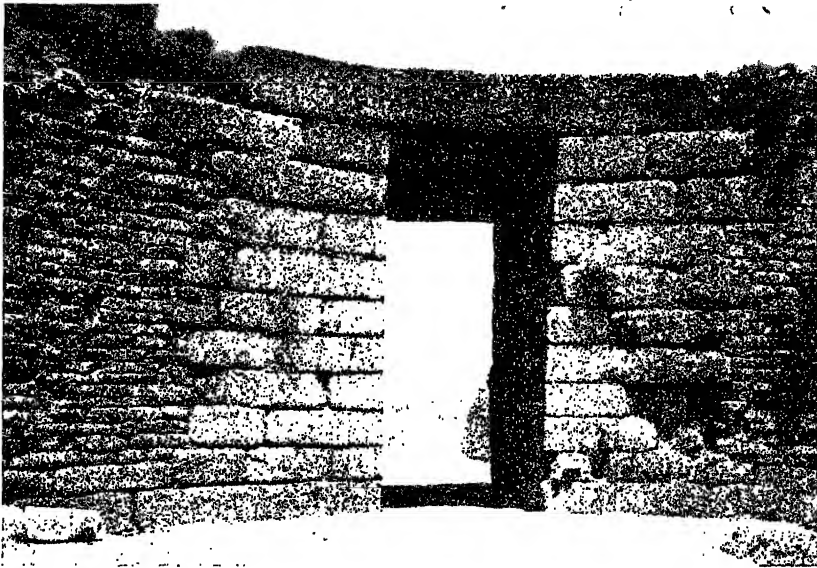
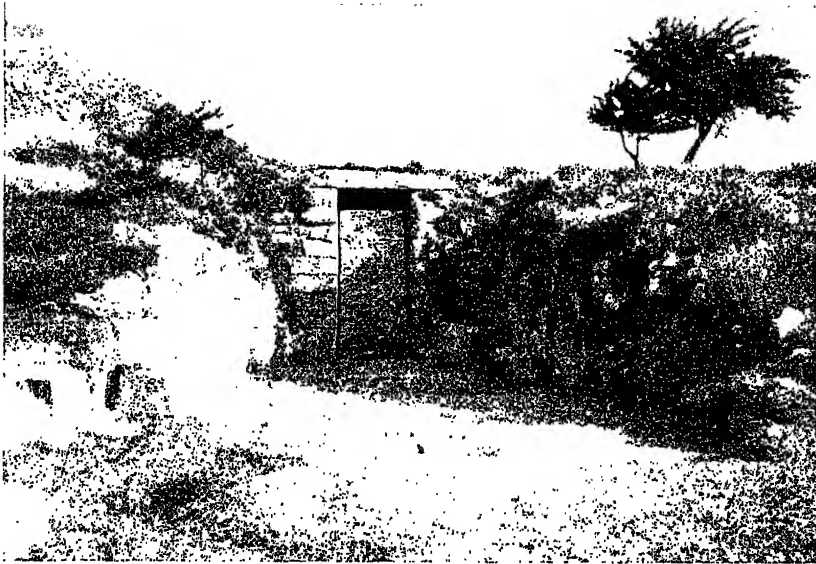
<sup>1</sup> Πρακτικά, 1892, p. 56; Tsountas-Manatt, *Mycenaean Age*, p. 124 ff.



is actually built (Pl. LIII.). This veneer of poros is coursed to correspond with the conglomerate work, and should therefore be contemporary with it; indeed, as the front of the conglomerate masonry is irregular, the poros blocks are very carefully cut on their inner face to fit it. It seems clear that the builders of this tomb, though well able to handle and dress a soft stone like poros, had not yet obtained sufficient mastery in hard stone-work to make such use of the nobler material as was done by the builders of the later tholoi. Conglomerate too is very much heavier than poros or indeed than limestone. The poros veneer has a double fascia or frame cut in it which was carried on to the outer lintel-block and returned horizontally along it. As the outer lintel was not high enough to accommodate the double fascia, the line of the outer fascia was cut on the lower edge of a row of conglomerate blocks set just above the lintel. These other blocks are lying in the dromos, and their original position as well as that of the outer lintel are indicated in the section by dotted lines. The façade of this tomb, with its double door-frame and the insertion of an actual door, is the most elaborate of those so far described, and forms a good precedent for the still more imposing façades of the Treasury of Atreus and of the Tomb of Clytemnestra.

The tholos is very large, about 14 m. in diameter, and if the calculations of the curve are correct would have been nearly 15 m. high. It must therefore have stood out well above the level of the hillside, and have been very noticeable even when covered, as no doubt it was, with a large mound of earth. Stamatakes observed traces of a low wall which supported the base of this mound.<sup>1</sup> The tholos floor is cut out of the native rock, and covered with a layer of cement. The heavy conglomerate is carried well to the side of the doorway within the tholos, and makes the structure much more massive and imposing. There is a base course of large rectangular conglomerate blocks for the walls of the tholos, which are otherwise built of smallish blocks of limestone roughly dressed into rectangles (Fig. 65). The limestone construction of the tholos resembles that of the Panagia and Kato Phournos tombs, but the blocks or slabs are much better shaped. The contrast between the limestone work of this tomb and that of the Tomb of Aegisthus is very striking. Probably the Mycenaeans had by now discovered that a tholos built of well-dressed material, especially if that material were rectangular, was far more likely

<sup>1</sup> *Ath. Mitt.* 1878, p. 273.



FIGS. 64, 65.—THE LION TOMB.

FIG. 64.—DROMOS AND FAÇADE.

FIG. 65.—DOORWAY FROM THE THOLOS.

to be stable than one constructed of rough limestone slabs. Still, it was hardly wise of them to place a heavy conglomerate lintel-block upon a thin façade of poros. In any case, however, this tomb is from its size and plan the most ambitious of those hitherto discussed, and also it is the best built. Those who planned and erected it were engineers of no little skill.

In the eastern sector of the tholos are three grave-pits. One is very large and is 5.60 m. long by 2 m. wide and 3 m. deep. Another, which was lined with well-cut slabs of poros, is 2.40 m. long and 1 m. wide and 2 m. deep. The third is much smaller and merely roughly hewn out in the rock: it is 2.40 m. long by 1 m. wide, and not much over 1 m. deep. The number and size of these grave-pits suggest that the tomb was in use for some little time, and that secondary interment was practised in these tholoi as in the private chamber tombs. In this connection it is remarkable that in the tombs of the cemetery of Zafer Papoura and Isopata at Knossos,<sup>1</sup> secondary interment is rare, and that even if another body was introduced into a tomb, the first tenant of the sepulchre was little if at all disturbed. In the case of the Kalkani cemetery (roughly contemporary with Zafer Papoura and Isopata), this was very far from being the case at Mycenae. This difference in burial customs may indicate a racial distinction between the Cretans and the Mycenaeans, in spite of the fact that the latter had almost entirely adopted the religion and civilisation of the former.<sup>2</sup> The Mycenaeans, however, as far as civilisation is concerned, did blend their own ideas with the imported Minoan culture, and by the Third Late Helladic Period had evolved a specifically Mycenaean culture differing much from the Minoan civilisation from which it had sprung.

#### *Finds.*

#### *Pottery.*

In re-clearing the dromos and tholos we found a quantity of pottery which can be classified thus:—

At the very entrance to the dromos on the east side where the blocking wall presumably once ran across, a good deal of miscellaneous ware was found:—

<sup>1</sup> Evans, *Prehistoric Tombs of Knossos; Tomb of Double Axes*.

<sup>2</sup> See, however, Bosanquet-Dawkins, *Unpublished Objects from Palaiakastro*, p. 152; secondary burials appear there to have been common.

Middle Helladic, Matt-painted ware,

Group B.I., ten sherds.

Group B. III., four sherds.

Group D. I., light-on-dark, one sherd.

Plain polished, about fifteen sherds.

Late Helladic I.-II., twelve sherds, including one piece with the stippled or thrush-egg pattern painted inside and out in the Cretan manner. There were also three unpainted pieces.

Late Helladic III., fifty to sixty fragments.

Geometric ware, one sherd.

In the rock cutting for the threshold were :—Two L.H. II. sherds, sixteen L.H. III. pieces and two Geometric fragments.

In the dromos and tholos were :—

Middle Helladic, Matt-painted, all three groups, six sherds.

” ” Minyan, one sherd.

Late Helladic II., sixty-two pieces, including one sherd of Ephyraean ware, pieces of alabastra, and fragments with the double-axe and thrush-egg or stippled patterns. There were also many pieces of Palace Style amphorae, the more interesting of which are shewn in Pl. XLV., *a-d*.

Late Helladic III., eighty-two fragments.

Geometric and Hellenic, sixty-two do., among which the latter are scarce.

In the biggest grave in the tholos we found one M.H. sherd, two pieces of L.H. I.-II. ware, eight L.H. III. fragments, and three Geometric sherds.

#### *Miscellaneous.*

Lamp of white marble, .14 m. high, .295 m. in diameter, found by Tsountas in the dromos, Athens, Nat. Mus. 2921. This is of an ordinary L.H. II. type and has a pattern of broad ribbed leaves running up the stem and drooping over the rims : there are two lips for wicks and below the rim midway between them on either side are handle-like projections (Pl. LII., *a*).

As Tsountas had previously cleared the tomb there is naturally no certainty that any of these sherds really belonged to the original funereal deposits. Still the number of L.H. II. sherds, especially of Palace Style amphorae, does suggest, as in the case of the Kato Phournos, that this tomb should not be dated later than the Second Late Helladic Period. The quantity of Geometric ware is also very striking, and might indicate that in this tomb, as in that at Menidi,<sup>1</sup> the cult of the dead princes buried here continued long after their earthly kingdom had passed away.<sup>2</sup>

<sup>1</sup> Frazer, *Pausanias*, III, p. 137.

<sup>2</sup> Cf. also the creation of a sacred area round the tombs of the Shaft Grave Dynasty; see above, pp. 121 ff.

Though the potsherds give a hint for the dating of the tomb, yet in regard to its position in the series of the tholoi their evidence should not be allowed to override that derived from the observation of the structure of the tomb.

#### D. THE TOMB AT THE ARGIVE HERAION (Pl. LIV.).

This tomb,<sup>1</sup> as shewn clearly on Steffen's map, lies about a kilometre west of the ruins of the Argive Heraion. It was discovered in 1872 and was excavated by Stamatakes in 1878 for the Greek Archaeological Society; he published an account of his excavation in the *Athenische Mitteilungen* the same year.<sup>2</sup> The more important vase fragments were illustrated by Furtwängler and Loeschcke in their *Mykenische Tongefässe*.<sup>3</sup>

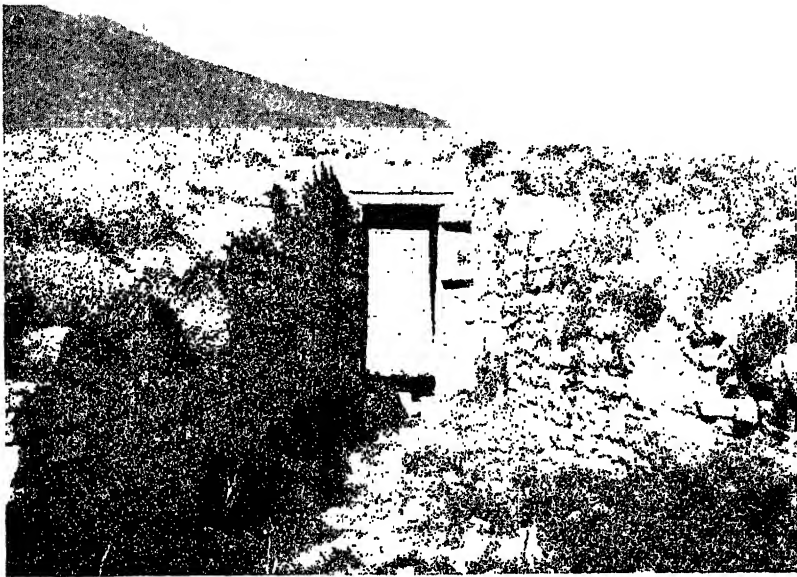
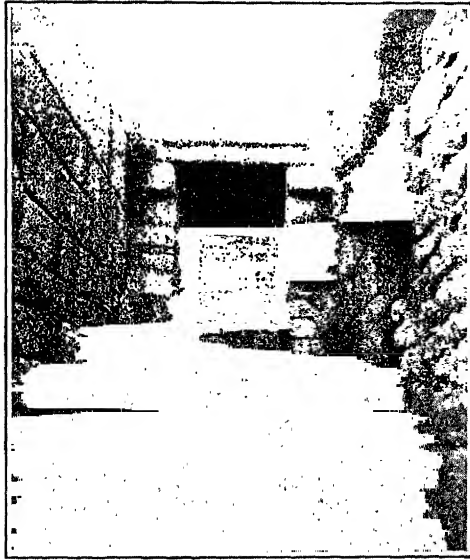
The dromos (Fig. 67) is about 18 m. long and about 3 m. wide, but narrows slightly towards the top. The walls, which incline inwards towards the top, are in good condition on the whole, but some of the upper masonry has disappeared. According to Stamatakes the entrance or western end of the dromos was blocked by a low wall in rubble, which he rightly says served the same purpose as the similar blocking walls in poros still preserved in the three tombs of the third group. To within about five metres of the façade on either side the dromos is lined with walls of rubble masonry, which were mortared with the usual tough yellow clay, and crowned by a row of small slabs. For about five metres on either side of the façade the walls of the dromos are lined with good ashlar work in poros. This ashlar work does not bond in any way with the rubble lining, but is quite independent and separated from it by a clean joint.

The doorway of the tomb is nearly 2 m. wide, nearly 4 m. high, and 4.50 m. deep (Pl. LIV., Fig. 66). The walls incline inwards towards the top as usual. When Stamatakes cleared the tomb the actual doorway was blocked by a wall of rubble masonry, which seems to have been about 3 m. high. The fact that this wall, when found, did not reach to the top of the door may indicate, as Stamatakes thought, that the tomb had been entered and plundered; that it

<sup>1</sup> It lies so near and in a place where the natural building material available is the same as at Mycenae, that it can for all practical purposes be included here among the Mycenae tholoi.

<sup>2</sup> Pp. 271-286.

<sup>3</sup> Plate XII.



FIGS. 66, 67.—THE HERAION TOMB.

FIG. 66.—FACADE BEFORE POROS BLOCKS WERE PLUNDERED FROM LEFT JAMB.

FIG. 67.—DROMOS AND FACADE IN 1923.

had been plundered was confirmed by the disturbed condition of the earth both in the dromos and in the tholos itself. The doorway is roofed by three big lintel slabs of conglomerate, none of which shew any trace of the use of the saw. The side walls of the doorway are mainly built of limestone, only one or two of the upper blocks directly below the lintel being of hammer-dressed conglomerate. The joints of the side walls of the doorway, of the ashlar masonry of poros in the dromos, and of the façade are pointed with stucco. The outer lintel-block has cut in it at the top a fascia, which is carried down on to the top conglomerate blocks or imposts of the jambs. Both the lintel and the conglomerate blocks directly below it on either side project some thirty or forty centimetres in front of the true jambs of the doorway. Beneath the projecting conglomerate slabs and in front of the true jambs, false jambs of ashlar work in poros are set. On them the fascia is carried down to the ground. This facing of the jambs with ashlar work in poros underneath a projecting lintel is an exact parallel to the Panagia Tomb. The use of poros work in ashlar underneath lintels of conglomerate is also repeated in the Lion Tomb. Consequently, architecturally the Heraion Tomb should not be far removed in date from them, and is to be classed in our second group. The first group ends with the Tomb of Aegisthus, which is to be dated, as we have seen, to the end of L.H. I. and the beginning of L.H. II. The second group, therefore, cannot be earlier than L.H. II. and, we shall see below, cannot be later than the end of that period, for the third group begins with L.H. III. Thus if our method of structural analysis is correct, this tomb belongs to the second group, which by the above considerations should fall in L.H. II. or the fifteenth century B.C. This date is confirmed by the evidence of the objects found by Stamatakes.

The tholos is about 9.50 m. in diameter, and, if the calculation of the curve is correct, would have been about 10 m. high. The top of the cone would have projected well above the hillside, and Stamatakes found traces of a mound of earth which had covered it. Round the base of this mound, as in the case of the Lion Tomb, ran a low wall of stones to prevent the earth washing away during rain-storms. The upper part of the dome had fallen in, and among the stones he cleared out of the tholos Stamatakes found a rectangular stele which he thought might have crowned the mound of earth over the dome on the outside. The walls of the tholos are built

of rubble masonry packed with the tough yellow clay. There is no foundation course of large blocks at the base of the wall. The limestone slabs of the walls are built up on the same system as those in the Tomb of Aegisthus, but an attempt has been made to shape them. The joints between them are filled in with chips and splinters. The construction of the walls most resembles that of the Kato Phournos, and is not so careful as that of the Lion Tomb.

*The Grave-Pits.*

Stamatakes says that the floor of the tomb, which was otherwise cut out of the native rock, was covered with small pebbles set with yellow clay. Cut out into the floor of the tholos are three grave-pits, of which (a) measures 2.40 by 1.50 m. and is 1.20 m. deep; (b) measures 2.80 by 1.50 m. and is 1.25 m. deep; and (c) is 2.05 by .90 m. and .80 deep.<sup>1</sup> As he found in these pits Greek lamps, a stamped tile and other fragments of late Classical pottery, and a piece of iron, Stamatakes thought that they were graves which had been dug in the tholos in late Classical times. From our knowledge of the other tholos tombs it seems more probable that these were made to contain the remains of the earlier interments. They are paralleled by the grave-pits in the tholoi at Mycenae, and by the unplundered grave-pit found by Tsountas at Vaphio. By the side of these grave-pits were several big slabs which had obviously served to roof them. Stamatakes thought that the human bones which he found in the tholos shewed traces of cremation. Probably he only observed the ordinary signs of carbonisation which are to be seen in almost every tomb. Such carbonisation was mistaken by Schliemann in the Shaft Graves at Mycenae for cremation. The state of the bones from the Shaft Graves proves clearly that the dead were not burnt. Further evidence is provided by the objects from the Shaft Graves; for if the gold and other metal work had been on a funeral pyre it would be fused more or less, but such is not the case. Similarly, here the gold and other objects found with the bones shew no traces of fire. We may therefore safely conclude that Stamatakes mistook traces of ordinary carbonisation for signs of cremation.

The Classical pottery and other objects found in these pits indicate

<sup>1</sup> Stamatakes' measurements of these pits do not agree with his plan, which is not quite accurate.



that the tomb was entered and plundered in late Classical times even if it had not been robbed before. That it could have been then entered easily shews that the dome was still standing; for after its collapse the tomb could not have been plundered without a serious excavation.

### *Finds.*

#### *A. Miscellaneous.*

##### I. The Dromos and Doorway.

Before the doorway of the tomb and on the floor level Stamatakes found the following :—

1. (3317) <sup>1</sup> Small V-shaped gold ornament from necklace, length .01 m., width .008 m.; hollow; made of two pieces soldered together; two perforations for threading; a string of ornaments of this type would fit into one another and make a solid band; small floral design embossed at the base of the V (Fig. 68, *j*).

2. (3317) Half of ornament similar to 1.

3. (3317) Very small hollow round gold bead pierced for threading as part of necklace; diam. .003 m.

4. (3318) Rosette of gold foil, pierced round edges; diam. .02 m. (Fig. 68, *h*).

5-7. (3318) Three similar rosettes, but smaller; diam. .016 m.; also pierced round edges (Fig. 68, *d, f*).

8. (3318) Fragment of rosette similar to 4-7.

9. (3321) Part of strip of thin gold leaf, measuring .03 by .03 m.; pierced at edges for sewing on to garments; roughly embossed with design of lily-buds in pairs arranged vertically one above the other (Fig. 68, *a*).

10. (3319) Fragment of gold foil similar to last, but unembossed; length .035 m., width .017 m.

11. (3319) Fragment of gold foil similar to 10; length .37 m., width .018 m.

12. (3320) Eight very small pieces of gold leaf.

13. (3325) Bronze rivet with broad heads at each end from a sword-hilt; for fastening the covering of the hilt on to the metal tang; length .03 m.

14. (3324) Bronze arrow-head broken into three fragments, no tang, long barbs; length .05 m. (Fig. 68, *m*).

15. (3326) Cylindrical piece of bronze; length .028 m.; traces of hole bored through one end, which is broken.

16-20. (3329) Five flakes of obsidian.

21. At the outer end of the dromos about 1.00 m. above the ground level was found a bronze disc, shaped like a miniature mirror with a broken handle; diam. .018 m.

<sup>1</sup> The numbers in brackets are those of the inventory of the National Museum at Athens. As Stamatakes' description and illustration of these objects are insufficient, they are republished here.

## II. The Tholos.

In the tholos Stamatakes found the following :—

22. (3317) Small gold ornament from necklace; length  $\cdot 007$  m., width  $\cdot 005$  m.; hollow, made of two pieces soldered together at edges; shaped like an inverted 2 with beaded edge along top perforated for threading; second perforation through the spiral (Fig. 68, *i*).

23. (3317) Lentoid bead of gold, made of two pieces soldered together at edges; pierced for threading; diam.  $\cdot 01$  m. (Fig. 68, *k*).

24. (3317) Small gold cloison for holding a small stone or piece of paste decoration, triangular in shape; length  $\cdot 008$  m.; made of two pieces soldered at edges; back plain; pierced for threading.

25. (3317) Small gold stud; length  $\cdot 005$  m.; head is ellipsoidal in shape, measuring  $\cdot 007$  by  $\cdot 004$  m. (Fig. 68, *l*).

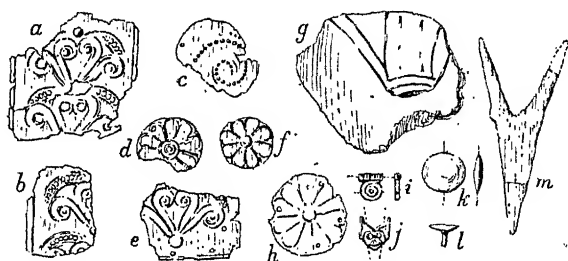


FIG. 68.—THE HERAION TOMB: GOLDWORK, ETC., FOUND BY STAMATAKES. (Scale 1 : 2.)

26. (3317) Part of tube of fine gold leaf bent over, crushed; length  $\cdot 022$  m.

27. (3321) Part of end of strip of thin gold foil; length  $\cdot 025$  m., width  $\cdot 017$  m.; pierced along edge for sewing to garments; embossed with same design as *g* (Fig. 68, *e*).

28. (3321) Part of strip of thin gold foil; length  $\cdot 02$  m., width  $\cdot 02$  m.; pierced along edge for sewing on and embossed with same design as *g* and *27* (Fig. 68, *b*).

29. (3321) Piece of gold leaf; length  $\cdot 022$  m., width  $\cdot 015$  m.; pierced for attachment to garments; shews part of spiral design rendered by continuous line of small round punch-marks (Fig. 68, *c*).

30. (3322) Strip of gold foil; length  $\cdot 03$  m., width  $\cdot 012$  m.; quite plain; possibly once covered an inlay.

31. (3322) Strip of gold foil; length  $\cdot 035$  m., width  $\cdot 008$  m.; quite plain.

32. (3323) Thirty-six small pieces of gold leaf found on the still existing part of the pebble floor of the tomb.

33. (3327) Part of handle of bronze vessel; length  $\cdot 55$  m.; at broader end is hole by which it was fastened to vessel by a rivet.

34. (3327) Seven pieces of bronze vessels; to one a scrap of gold leaf still adheres.

35-45. (3328) Eleven flakes of obsidian; only nine really obsidian, one of chert, one of creamy flint.

46. (3335) Fragment of Egyptian bowl of blue glazed faience, decorated on the inside with pattern of lotus-buds in black outline. This resembles fragments of the glazed bowls and other objects from the temple of Deir El Bahri, which date from the reigns of Hatshepsut and Thothmes III, XVIIIth Dynasty, 1500-1450 B.C. (Fig. 68, g).

47-51. (3338) Five fragments of lamps in dark green steatite; four come from lamp <sup>1</sup> with spiral pattern on rim, while under lip is design of oblique lobes; see Pl. LV., b; height .11 m., diam. .23 m.; fifth piece is part of spiral design of similar lamp.

52-53. (3338) Two fragments of flower-bowl in dark green steatite.<sup>2</sup>

54. (3338) Part of base and body of vase in speckled grey and white stone; height .10 m.

55-56. (3338). Two fragments of undecorated lamps, of dark green steatite; one was about .105 m. in diameter.

57. (3338) Base of large vase of dark green steatite; really the base of the lamp 47-51.

58. (3339) Eleven fragments of an alabaster vase which fit together; this is a tall tub-like vase, height .185 m., diam. 13 m.; the raised bands at top and bottom and the facets of the sides clearly represent the bands and staves of a wooden barrel (Pl. LV., a).

59. (3336) Two fragments of alabaster vase which fit together; diam. .14 m. approximately; this is part of the wide flat lip of a baggy alabaster vase of the ordinary Egyptian XVIIIth Dynasty type; similar vases were found at Vaphio <sup>3</sup> (L.H. II.) and in the royal tomb at Isopata <sup>4</sup> (L.M. II.), and in the chamber tombs at Kalyvia near Phaistos <sup>5</sup> (L.M. III.); lip was .035 m. wide.

60. (3330) Small ornament of glass paste, grey, shaped like an ivy-leaf with two holes pierced through it for threading as part of a necklace; length .013 m.

61. (3330) Similar ornament composed of two ivy-leaves; grey glass paste; length .025 m.; also pierced for threading.

<sup>1</sup> Lamps of this type were found in the Royal Tomb at Isopata, which is of L.M. II. date (Evans, *Prehistoric Tombs*, Figs. 126, 127); at Palaikastro, also L.M. II. (Bosanquet-Dawkins, *op. cit.* Pl. XXX. Fig. 3, p. 138; and in Tomb 102 at Mycenae (Bosanquet, *J.H.S.* 1904, Pl. XIV. a, b), which dates from L.H. II.

<sup>2</sup> Probably of the XVth cent., cf. the L.M.II. specimens, Maraghiannis, *Ant. Crétôises*, ii. Pl. XIX., 1, 12; Evans, *Prehist. Tombs*, pp. 35, 76, 89, Fig. 100e.

<sup>3</sup> 'Εφ. 'Αρχ. 1889, pp. 153, 154.

<sup>4</sup> Evans, *Prehistoric Tombs*, Fig. 125, s. 3; Fimmen, *Kretisch-Mykenische Kultur*, p. 174.

<sup>5</sup> Cf. *Mon. Ant.* xiv. p. 554; cf. Bosanquet, *J.H.S.* 1904, pp. 325 ff.

62. (3330) Another ornament of grey glass paste similar to 61, but of one ivy-leaf and broken.

63-71. (3332) Nine fragments of large amygdaloid bead of lapis lazuli; length at least .03 m.

72. (3331) Ornament of grey glass paste with three curling leaves,<sup>1</sup> one below the other, similar to Pl. LXI, 2 b; broken and in very brittle condition; the plaque at the root has two sunk circles instead of the usual one; length .04 m.

73. (3332) Segmented bead of blue glass paste, of two sections; length .005 m.; with this also two lumps of cobalt blue, and one small lump of green colouring matter.

74. (3337) Many fragments of ivory undecorated.

75-77. Three pieces of wild-boar tusks; perforated through their under edges for sewing on as protection to a leather helmet.<sup>2</sup>

The above objects, Nos. 35-77, were found at the two places where the pebble floor of the tomb was still preserved. In the grave-pit which lies directly on the right of one entering the tholos (c) the following objects were found:—

78. Lamp, similar to those found in Greek tombs.

79. Similar lamp.

80. Half of similar lamp.

81. Fragment of glass green in colour.

82. (3341) Part of wide curved roof-tile broken in two; on outside the inscription - - - - ΑΗΣΑΡΧΙΤΕΚΤΩΝ. Cf. *I.G.* iv. 541-551.

83. Piece of iron; much rusted. This must have been a modern intrusion.

We have not been able to identify Nos. 78-81 and 83, in the Mycenaean collection at Athens, but obviously they would be of no importance for determining the date of the construction of the tomb.

Stamatakes does not mention a small double-axe of fine pale green steatite (length .037 m., width .016 m.; Athens, Nat. Mus. 3333), pierced for a shaft or for threading.

### *B. Pottery.*

#### *I. The Dromos and Doorway.*

Stamatakes found a quantity of vase fragments here. Many of these, he says, were similar in paint and decoration to the vases found at Mycenae. With them, however, were a number of fragments of Greek and Roman lamps.

#### *II. The Tholos.*

Stamatakes found many vase fragments here similar to those from the dromos.

Of this pottery a certain amount is in the National Museum at Athens grouped under No. 3339, but no details are preserved as to whether it comes

<sup>1</sup> See below, pp. 397 ff.

<sup>2</sup> See Tomb 518.

from the dromos or the tholos. There are twenty-two sherds of amphorae of the so-called Palace Style, not unlike those from the Tomb of Aegisthus and the three tholoi at Kakovatos. The most characteristic sherds have been illustrated by Furtwängler and Loeschcke,<sup>1</sup> who give an excellent idea of the patterns employed, indicating the bad condition or poor execution,<sup>2</sup> which is inferior to that of the vases from the Epano Phournos and Tomb of Aegisthus, and rather resembles that of the Kakovatos examples. They represent at least four to six vases and may all be assigned to L.H. II. With them there is a fragment from the base of the neck of a jug, and the stem (height .05 m.) of an unpainted goblet, both of which may possibly be of the same date, and a clay spool .04 m. long and in diameter.

#### 4. THE THIRD GROUP.

This, the last group, consists of three tombs, the Treasury of Atreus, which is known locally as the Tomb of Agamemnon, the Tomb of Clytemnestra, and the Tomb of Genii, the so-called Perfect Tholos Tomb. These tombs are distinguished by their size, by the excellence of their construction in hard well-dressed conglomerate, and in the case of the first two by their elaborate façades.

##### A. THE TREASURY OF ATREUS (Pl. LVI.).

This is so well known and has been described with such considerable detail by the French Expedition to the Morea,<sup>3</sup> by Thiersch<sup>4</sup> and by Adler,<sup>5</sup> that no detailed description of it is necessary here. We examined various points in 1920 and 1921, making tests in various places to find evidence to help in dating the tomb.

Before the entrance to the dromos is an open rectangular space artificially built up on the hillside, with the aid of a retaining wall of rough Cyclopean blocks. The entrance to the dromos was blocked by a low wall of ashlar work in poros of which only part of one course remains. This wall would have been similar to the walls still visible at the entrances to the dromoi of the Tomb of Clytemnestra and of the Tomb of Genii.

##### *The Dromos.*

The dromos (Fig. 69) itself is about 36 m. long and 6 m. wide, and is lined throughout on each side with magnificently built ashlar work in hammer-

<sup>1</sup> *Op. cit.* Plate XII.

<sup>2</sup> Furtwängler and Loeschcke in their text emphasise these points.

<sup>3</sup> Vol. II. Pls. LXVI.-LXXI.

<sup>4</sup> *Ath. Mitt.* 1879, pp. 177 ff.

<sup>5</sup> *Apud* Schliemann, *Tiryns*, pp. xxxvi. ff.

dressed conglomerate. The stones are well-coursed, and some of the lower blocks are of great size. The dromos is cut out of the soft rock of the hillside, and was floored with a thin layer of yellowish clay trodden down hard. But towards the eastern end or entrance the side walls are constructed on made ground. Apparently the retaining wall of the terrace outside the entrance was not solely intended to support the terrace, but also to hold up the ground round the east end of the dromos. We dug a trench across the dromos at a point about 5 m. from its entrance between the two big blocks of conglomerate which are built into the lining walls at this point. As already stated, for the greater part of its length the

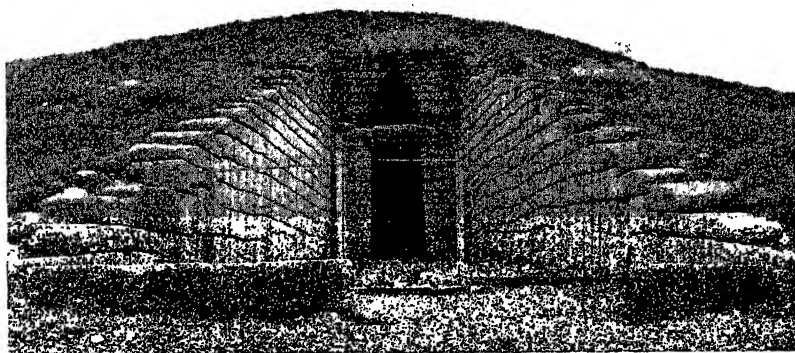


FIG. 69.—TREASURY OF ATREUS: DROMOS AND FAÇADE WITH REMAINS OF WALL CLOSING ENTRANCE TO DROMOS.

dromos is cut out in the soft rock of the hill. At this point between the two big blocks 5 m. from its entrance the original rock of the hill dropped away sharply to the east to a depth of 1·35, and the entrance to the dromos had to be built up on made ground. As seen in the sections in Fig. 70, this was carried out in the following manner. The dromos as usual is floored with white clay. Underneath the two big blocks on either side is a foundation of small limestone blocks well mortared with tough yellow clay. Below the floor on the rock surface there is an irregular mass of rough boulders tumbled together just as they came from the excavation of the dromos and the tomb chambers. These were covered over with powdered rock also derived from the excavation of the tomb, no doubt up to the level required for the actual floor of the dromos. The

big block in the north wall, as shewn in the section Fig. 70, actually spans a dip in the rock. Its west end rests on the edge of the rock where it first drops sharply to the east. But its east end also rests on a knob of rock which crops up at that point. This block is 6 m. long, over 1 m. high, and about 2 m. broad. The upper angles at each end are nicked just like the angles of the inner lintel-block of the Panagia Tomb (Fig. 59). Its underside has a beautifully smooth sawn surface. This block then was probably originally intended for a lintel-block, since no builder would saw a surface as smooth and then build it in where it could not be seen, but was for some reason or other discarded. Great pains were taken by the builders to terrace up the hillside here to support the east end of the dromos, and the open space in front. This terracing recalls the retaining wall of the Grave Circle and the creation of a heavy artificial terrace behind the acropolis wall for the construction of the Megaron of the Palace (see p. 246). It also recalls the great terracing operations undertaken at Tiryns for the building of the second citadel and later palace. The same spirit is observed to have been at work in all these cases, and it is difficult not to regard them all as work of the same epoch.

In the earth and powdered rock from beneath the dromos floor we found some potsherds, and all that were recognisable were L.H. III., and there was not a single sherd later than this date. Under the big supposed lintel-stone in the north wall we found nothing but Mycenaean pottery, of which one was recognisable as L.H. III. and with it was part of an ordinary Mycenaean (L.H. III.) terracotta female figurine. Under the stone in the south wall we found no sherds later than L.H. III., but two or three pieces with the thrush-egg or stippled design which might possibly be L.H. II. All the other sherds that were recognisable were unmistakably of L.H. III. style and shapes. The absence of any pottery here later than L.H. III. shews that these are not casual sherds which have intruded in later times. Their number and the positions in which they were found preclude this. They form, therefore, a very strong argument for dating this tomb to the Third Late Helladic Period, a date which agrees with that of the terracing at Mycenae and Tiryns just referred to as parallels. The terracing of the east end of the dromos of this tomb must have been contemporary with the building of the tomb; for it was done in order that material might be brought up easily during construction. The excavation, which was very patiently carried out by Dr. Boethius,

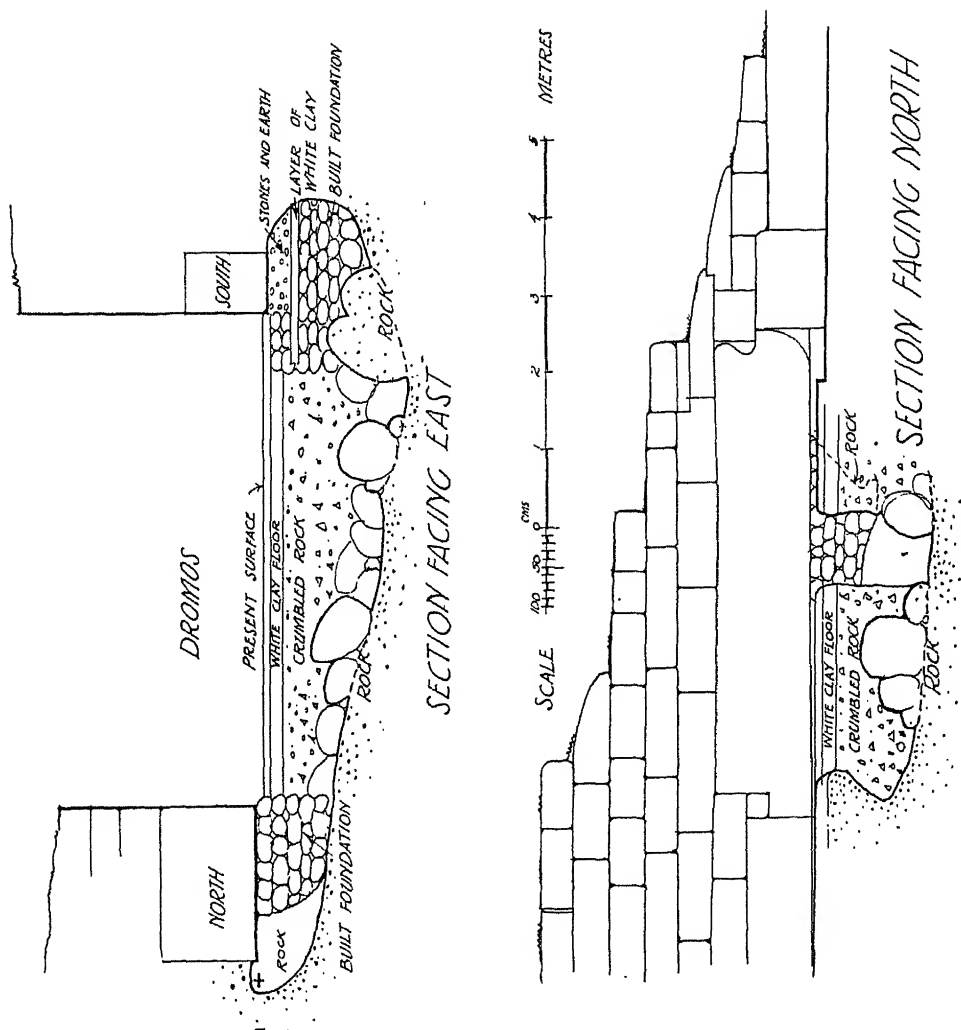


FIG. 70.—TREASURY OF ATREUS: SECTIONS BELOW FLOOR BETWEEN THE BIG BLOCKS OF DROMOS WALL. 1. L.H. III. TERRACOTTA FIGURINE.



shewed that the medium in which the potsherds mentioned were found was pure and undisturbed. We thus obtain a sure starting-point for our examination of the problem of the date of this tomb.

*The Façade* (Fig. 84).

The walls of the dromos do not bond with the façade <sup>1</sup> of the tomb as in the Tomb of Clytemnestra, though at one or two points an attempt has been made to bond them. In contradistinction to the walls of the dromos, where all the ashlar work is hammer-dressed (with one or two exceptions), the use of the saw is comparatively common on the façade. On either side and above the door (on the actual lintel) is sunk a door-frame with two fasciae, the edges of which are marked throughout by saw-cuts (Fig. 72). These fasciae where they run across the lintel are narrower than they are on the jambs. In the Lion Tomb and in the Heraion Tomb the fasciae are of uniform width throughout, but in the Tomb of Clytemnestra the arrangement is the same as here. Over the lintel is a relieving triangle, tall and pointed. Here and in the Tomb of Clytemnestra the relieving triangle is higher outside than in. The façade of this tomb was elaborately decorated. On each side of the door-frame stood a half-column of green marble engaged against the ashlar work of conglomerate. These columns stood on rectangular bases of conglomerate sunk in small cuttings in the rock floor of the dromos (Fig. 72). Below the floor of the dromos these bases are rough irregular blocks. Above the floor level they are sawn into good rectangular stepped bases. Two dowel-holes on top shew where the columns were attached. Parts of the shafts of the columns are in the National Museum at Athens, and in the British Museum. Fragments of the capitals are also in Athens, and a reconstruction of the two columns with their capitals has now been set up in the British Museum.<sup>2</sup> Thiersch has shewn how the columns and their capitals were attached to the façade, and explains the use of the square plinths which project from the façade on a level with the top of the lintel directly above the actual capitals. As shewn in the section, these plinths or secondary capitals project considerably from the façade, which otherwise is set back above the lintel. Along the front and inner sides of the plinths (*i.e.* the sides towards the doorway) there is a shallow cutting with three dowel-holes as if for the

<sup>1</sup> Cf. Durm, *Jahreshefte*, x. pp. 46 ff.

<sup>2</sup> *B. M. Guide to Greek and Roman Antiquities*, 1920, pp. 2 ff., Pl. I.

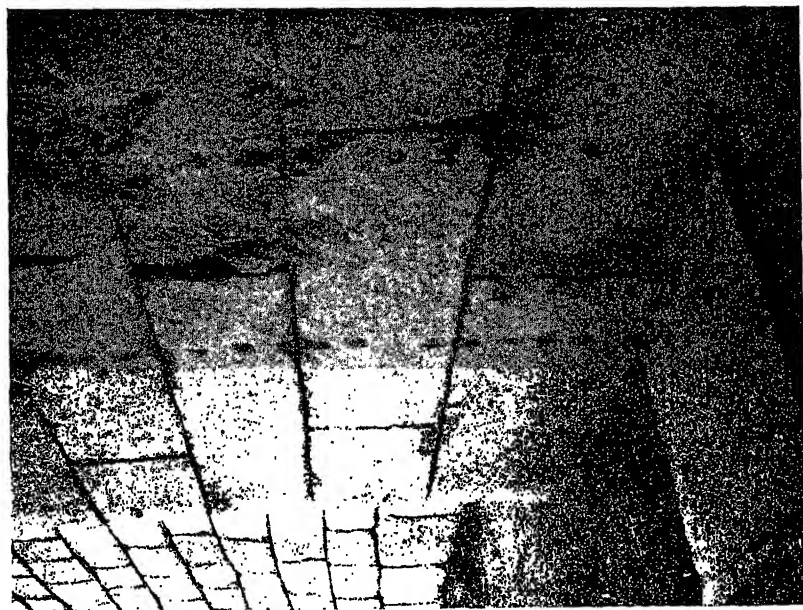
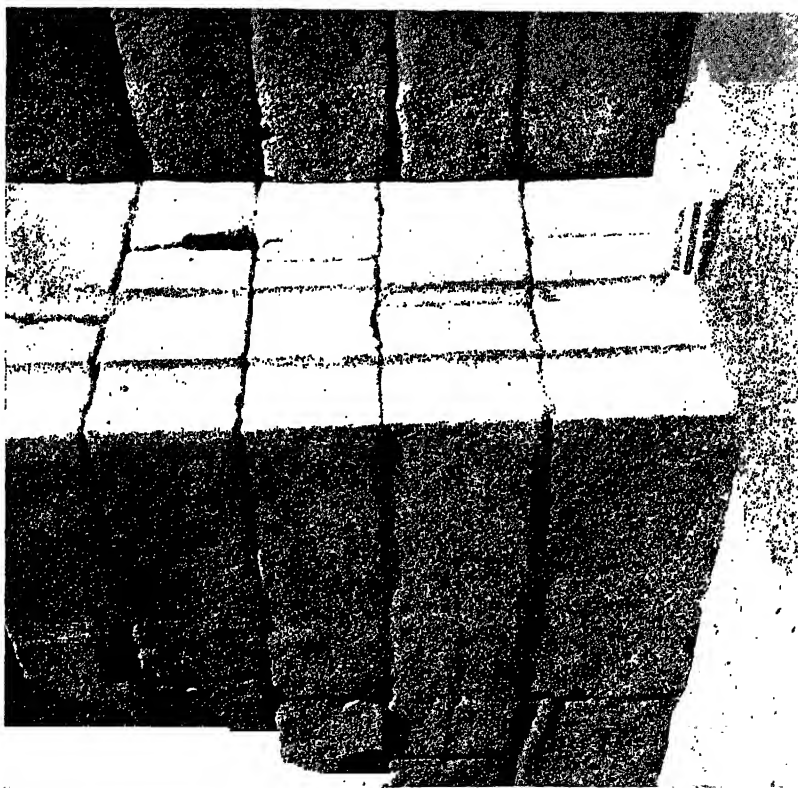


FIG. 71.—SOUTH SIDE OF DOORWAY, FROM THOLOS, SHEWING THRESHOLD AND HOLES FOR NAILS OF DOOR-FRAME.



FIGS. 71, 72.—TREASURY OF ATREUS.

FIG. 72.—NORTH JAMB OF FAÇADE SHEWING COLUMN BASE AND SAWN FASCIAE.

attachment of thin vertical slabs forming decorative veneers for pilasters carried upon the capitals. The opening of the relieving triangle above the lintel was clearly masked with something, and the dowel-holes visible in the upper façade shew that some decorative work was attached to it.

Thiersch <sup>1</sup> calls attention to a small triangular piece of red marble sculptured with an elaborate spiral design found by Stamatakes in this tomb. This stone from its shape was clearly intended to fill the apex of the relieving triangle. Other fragments of the same stone in the National Museum at Athens,<sup>2</sup> in the British Museum,<sup>3</sup> at Munich <sup>4</sup> and at Nauplia, probably also once formed part of the ornamental work which closed the opening of the relieving triangle from outside. There are in the British Museum two other decorative slabs from this tomb. One <sup>5</sup> shews a row of round discs and above it a running spiral pattern, the two being separated by a low moulding. Here as in the other decorative slabs the use of the saw, tubular drill and chisel is to be observed. This slab as suggested by Donaldson <sup>6</sup> probably formed part of the frieze which ran across directly above the lintel between the two plinths or secondary capitals. The discs would then represent, as often in Minoan and Mycenaean art, the ends of round beams. This frieze has an exact parallel in the façade of the Tomb of Clytemnestra, where part of it with the discs is still *in situ*.<sup>7</sup> The slab is simply hammer-dressed on its under side, but on its upper side above the spiral band there are two dowel-holes indicating that some other slab had been fastened above it. It is approximately the same height as the two plinths mentioned, and so would fit in well between them, but must not be imagined to have projected as far as they do. This is shewn by the dressing on the upper surfaces of the plinths, which indicates that the ornament set above them returned over the

<sup>1</sup> *Ath. Mitt.* 1879, Pl. XIII. A. Those who consult the inventory of the National Museum at Athens about objects from this tomb and the Tomb of Clytemnestra should remember that Stamatakes called the Tomb of Clytemnestra 'Tholos Tomb 1' and the Treasury of Atrous 'Tholos Tomb 2,' while Tsountas reversed the numbers, calling the former 2 and the latter 1.

<sup>2</sup> Perrot-Chipiez, *Hist. d. l'Art.* vi. p. 624, Fig. 271.

<sup>3</sup> *B. M. Sculpt.* i. p. 13, 1; Perrot-Chipiez, *op. cit.* vi. p. 622, Fig. 269.

<sup>4</sup> Perrot-Chipiez, *op. cit.* vi. pp. 623, 625, Figs. 270, 273.

<sup>5</sup> *B. M. Sculpt.* i. p. 13, 2; Perrot-Chipiez, *op. cit.* p. 627, Fig. 275.

<sup>6</sup> Stuart-Revet, *Antiquities of Athens*, Supplement, Pl. V.

<sup>7</sup> See below, p. 359, Fig. 77, Pl. LVIII.

actual doorway to a line flush with the façade below the lintel. We can therefore place this slab with the discs and spiral pattern between the plinths so that its face is flush with the lintel below. The other fragments of decorative work in red marble from this tomb in Athens <sup>1</sup> and in the British Museum <sup>2</sup> are decorated with the well-known Mycenaean half-rosette and triglyph pattern. This was popular enough with Mycenaean architects and decorators, but as a rule, as, for instance, in the paintings in the Court of the Palace, it forms a kind of dado at the bottom of the whole system of decoration.<sup>3</sup> How then we should apply this ornament to the upper façade of the Treasury of Atreus we can only conjecture. It is possible that it formed a band running directly above the plinths or secondary capitals and above the frieze just mentioned. The sides of the relieving triangle are at the bottom almost vertical, but the red marble slabs with the zones of spiral design have oblique edges wherever they are preserved. Possibly then the spiral pattern did not come right to the bottom of the relieving triangle, which then would have been covered by a band of this rosette and triglyph pattern carried right across. What decoration there was on the upper part of the façade at the sides of the relieving triangle is unknown; there is insufficient evidence to attempt a restoration. There may have been merely two horizontal bands of decorative stone-work with the rosette and triglyph pattern attached to the façade on either side where the two horizontal rows of dowel-holes are visible to-day.<sup>4</sup> Against this it may be argued that in view of the setting back of the façade above the lintel one would naturally expect the whole of the upper façade to be covered with decorative stone-work so as to make it flush with the lower façade. Also it would be much easier to build up the decorative work of carved slabs by standing these one above the other, with the lowest resting on the carved frieze that ran across the lintel, than to attach such slabs at intervals to an otherwise rough façade by means of dowels, though it would be natural to use dowels to support the other system. The overlying cornice of conglomerate at the top of the façade would have helped to keep this decorative

<sup>1</sup> Perrot-Chipiez, *op. cit.* pp. 627, 628, Figs. 276, 277.

<sup>2</sup> *B. M. Sculpt.* iii. p. 452, No. 2725.

<sup>3</sup> See above, p. 235, Pl. XXXV., a.

<sup>4</sup> It might be thought that the use in a vase (Evans, *Prehist. Tombs*, p. 159, Fig. 144) from the Isopata Tomb of two bands of this pattern one above the other with a narrow zone of a chessboard pattern interposed between them could justify this suggestion, but it is not safe to argue from architectural motives employed in vase paintings.

vener in place. One other point is not quite clear. Were the sculptured slabs with the spiral pattern which masked the relieving triangle set into the triangle so that their face came flush with the surface of the ashlar work of conglomerate on each side, or were they set in front of the triangle so that their face came flush with the face of the other decorative work on the façade? This again is a question which cannot now be answered. It is possible that a very careful examination of the whole façade with the aid of a proper scaffolding, such as neither time nor means allowed us, might yield fresh evidence, but the actual remains of the decoration of the façade are too scanty and too shattered.<sup>1</sup>

*The Doorway* (Pls. LVI., LVII.).

The doorway of the tomb is 5.40 m. high, 2.70 m. wide and 5.40 m. deep. The walls incline inwards towards the top. It is built throughout of excellent ashlar work in hard conglomerate and most of the blocks have sawn surfaces.<sup>2</sup> It is roofed with two lintel-blocks, the inner one of gigantic size. It measures about 8 m. long by 5 m. wide, and is 1.20 m. thick, while its weight has been calculated at well over one hundred tons. It is remarkable that the Mycenaeans, once they had discovered the principle of the relieving triangle, continued to use such enormous lintel-blocks. Smaller blocks would have served the purpose quite well, and have been much easier to cut and handle. The relieving triangle is built at the correct angle at which masonry will stand, and consequently, if properly built, is sufficient to support the superstructure without any lintel; the use of which is to provide a rectangular frame for the door, as well as to steady the tops of the walls of the doorway on which the triangle rests. Probably the Mycenaean engineers, although they had discovered the principle of the relieving triangle, had not quite grasped all that it involved, and thought of it more as a device for relieving the lintel of weight than as a structural device for spanning an opening. In any case of course the amount of the dome supported by the lintel would only be equal to the cubic contents of the relieving triangle. However, the Mycenaeans somewhat later seem to have understood better the principle of the triangle and the natural angle at which masonry will

<sup>1</sup> The restorations by Perrot and Chipiez (*Histoire de l'Art dans l'Antiquité*, vi. Pls. V., VI.) are too imaginative.

<sup>2</sup> The blocks in the doorway of the Treasury of Minyas at Orchomenos are similarly sawn.

stand, to judge by the roofing of the subterranean passage leading through the wall to the secret cistern at Mycenae, and of the galleries at Tiryns. A big inner lintel-block spanning the doorway here undoubtedly helps to distribute the weight of the superincumbent masonry and so to relieve the door-jambs of lateral thrust. It is noticeable in this connection that in most of the tombs the inner lintel is the larger, possibly specially so made with this very object.

The doorway is paved with limestone slabs, of which some are now missing, and in the middle there is a threshold for a door. In the under side of the inner lintel there are also two pivot-holes, one on either side, for the double door. As shewn too in the section, there are on each of the side walls two vertical lines of bronze nails which descend exactly to the front and back line of the threshold (Fig. 71).<sup>1</sup> At the top of the second course of masonry on each side a short curved line of bronze nails runs out more or less horizontally. What this curved line of nails was intended for is unknown. It must have fastened something to the side walls. The vertical lines, of course, were to attach a door-frame of bronze or wood to the masonry. The lines of this frame can still be traced by the weathering of the stones, especially on the north wall.<sup>2</sup>

#### *The Threshold* (Pl. LVII.).

In the southern threshold block there are four bronze nails still *in situ* which would have served to fasten a threshold of bronze or wood covered with bronze.<sup>3</sup> The actual threshold consists of four stones. At the north and south ends are large blocks of conglomerate. These have straight sides against the walls and towards one another oblique sides. Between them are inserted a small and a big wedge of poros (Fig. 73). The driving in of two successive wedges, first a big and then a small one, was to make the threshold fit tight across the doorway. Owing to the inward inclination of the walls of the doorway a monolithic threshold block could not be manœuvred into place. The joints would not have shewn, as the whole was covered over with wood and bronze. The threshold was probably

<sup>1</sup> Similar lines of nail-holes exist in the Treasury of Minyas at Orchomenos.

<sup>2</sup> The two shallow cuttings 1.70 m. from the floor in the side walls within the actual tomb are probably modern, though it has been suggested they were made to receive the door-handles, but one is 1.10 m. distant from the frame, and the other only .90 m., and 1.70 is very high for a handle.

<sup>3</sup> The lower pivot holes would have been in this.

put in when the tomb was almost finished, for if it had been inserted at the beginning it might easily have been damaged during construction. No one would want to set the ends of a threshold under the side walls, as the resulting pressure of the superstructure would inevitably cause the ends to sink and the middle to rise. It is natural that the threshold should be put in almost at the end of the construction, and that it should be made on the wedge system, the correct method to employ.<sup>1</sup> With the permission of the Greek authorities we removed the two poros wedges in 1920, and lifted the southern threshold block along its inner edge. The whole threshold was packed tightly together with the usual tough yellow



FIG. 73.—TREASURY OF ATREUS: THRESHOLD SHewing WEDGE CONSTRUCTION AND SUCCESSIVE REMOVALS OF (a) SMALL, AND (b) LARGE POROS WEDGES.

clay, and was bedded in a shallow trench cut in the rock (Pl. LVII., *b*, Fig. 73). Under the blocks to make them level was a packing of small stones and earth. In this earth we found a quantity of gold leaf, a few potsherds and some other objects described below,<sup>2</sup> including bronze nails and scraps of ivory (Fig. 76). There is so much gold leaf that it cannot have intruded accidentally beneath the stone.<sup>3</sup> Further, till Stamatakes' excavation in 1879, the threshold as seen in the Elgin and French

<sup>1</sup> The threshold of the Treasury of Minyas at Orchomenos consists of two blocks set on the wedge principle: it was worked over in Hellenistic times.

<sup>2</sup> See p. 356.

<sup>3</sup> The rat-hole now (1923) visible by the side of the southern block has been made since our investigations.

drawings<sup>1</sup> was covered with a high mound of earth, so that for many centuries it was not visible. There is no drain below the threshold as in the Tomb of Clytemnestra, and no rain penetrates inside the tholos.

We can only conclude that these objects must have been there when the threshold was laid, especially as the presence of the yellow clay shews that the threshold was in its original state, and had not been touched in later times; for if so, we should expect later pottery than L.H. III. The threshold too, to judge by the pivot-holes and the lines of bronze nails for the door-frame, belongs to the original structure of the tomb. We know that the tomb was decorated inside, and the doors, presumably of wood, were probably inlaid with gold, ivory and other materials. The objects found by us then below the threshold are for the most part what may be termed decorators' waste. The gold leaf and ivory and broken bronze nails clearly fall into this category, and would have been swept with the loose earth into the trench to pack round the small stones. The potsherds can similarly be explained: all are of L.H. III. date and compare well with those from the first or earliest strata by the Lion Gate, and so date from the beginning of L.H. III., or the early fourteenth century B.C. The beads are less easy to place, especially the little green stone snail, which is exactly like one found by Stamatakes in the doorway.<sup>2</sup> Possibly the tomb was used, before it was quite finished, for the interment of some member of the royal family, and some of the smaller funeral offerings got scattered and swept below into the trench with the loose earth. In any case these objects correspond strikingly with those found by Stamatakes.<sup>3</sup> None of them is certainly earlier than the beginning of L.H. III., and thus agree well with the evidence of the pottery found below the dromos walls.<sup>4</sup>

Thus the cumulative evidence of the finds, apart from that of the architecture, for dating this tomb to the beginning of L.H. III. is very strong.

#### *The Tholos (Pl. LVI.).*

The dome itself, which is about 14.50 m. in diameter and 13.20 high, is built up in a great excavation in the rock, the sides of which apparently slope slightly inwards. At the same time the walls of the dome, though

<sup>1</sup> See p. 283.

<sup>3</sup> See below, pp. 353 ff. : cf., p. 356.

<sup>2</sup> See below, p. 354.

<sup>4</sup> See above, p. 340.



built of ashlar work in conglomerate mainly hammer-dressed, seem to be erected on the same system of counterweighting as those of the earlier tholoi. As explained by the French Expedition,<sup>1</sup> the sides of the facing blocks of the dome are not cut to fit one another so as to make a kind of horizontal arch. They merely touch at their inner angles, and the resulting interspace is packed tight with small stones driven in to make all solid. At the back the big blocks of the tholos wall are counterweighted so far as can be seen with a heavy mass of rough stones packed in behind them. The blocks in the lower courses are larger than those in the upper, and the eye or final course is capped by a large slab which has a hollow on its under surface to continue the line of the dome to a rounded point. The top of the dome projects above the surface of the hillside and is covered with a mound of earth which naturally serves to hold the masonry in place. Built on this system with well-dressed rectangular blocks of hard stone, the dome ought not to collapse if reasonable care is taken. Each successive ring of masonry should support itself if the joints are true, and it is well packed and counterweighted so as to make it fit tight within the circular excavation.

As is well known there are parallel horizontal rows of bronze nails in the walls of the dome, which, according to the usually accepted belief, attached gilt bronze rosettes or some other form of decoration to the walls.

#### *The Side Chamber (Pl. LVI.).*

In the north sector there is a doorway leading into a small rectangular side chamber.<sup>2</sup> The doorway is 1.50 m. wide, 2.40 m. deep and 2.50 m. high. It is roofed with two lintels, above which is the usual relieving triangle. In the under side of the outer lintel and about the middle of the doorway are pivot-holes for a door, and on the side walls below a vertical row of bronze nails indicating the position of the door-frame, and another row of nail-holes at the outer edge of the doorway.<sup>3</sup> There was undoubtedly a threshold, but this has now long since disappeared. In the lintel and on either side of the doorway there are nail-holes for the

<sup>1</sup> *Expédition de Morée*, ii. Pl. LXVI.

<sup>2</sup> The orientation of this chamber is not quite correctly shewn on earlier plans. Its axis is not at right angles to that of the tholos and dromos (nor south of this as in Thiersch's plan), but slightly turned to the north.

<sup>3</sup> Only five such holes are visible on the southern side, where the angles are damaged, but the end is well framed on the north side and has been marked on the plan accordingly.

attachment of an ornamental fitting, just like the holes for the fastening of some ornaments on the outside surface of the lintel of the main doorway. Within the doorway we enter a passage 3 m. wide and about 2.50 m. long. This leads direct into a roughly rectangular chamber measuring about 6 m. square and 6 m. high. It is cut out of the soft rock of the hillside. In the centre is the shallow pit found by Schliemann<sup>1</sup> and by it lie two dressed conglomerate bases, Pl. LVII. *a*. In the north-west angle we found a grave-pit about 1.75 m. long by .80 m. wide and about .45 m. deep. We carefully sifted the earth from this pit, but found nothing. Just within the doorway we found another very irregular and shallow cutting in the rock floor, which did not seem like a grave-pit and is therefore not shewn on the plan. On the inside of the jambs of the doorway to this chamber the stones have a dressed edge .10 m. deep, as though a wall was intended to be built up to them, as indicated on the plan. It is possible that this side chamber was intended to be lined and perhaps roofed just like the corresponding chamber to the tholos tomb at Orchomenos, though it is difficult to see how a ceiling of slabs could have been built in. There are, however, no traces at all left of any such wall. This is surprising in spite of the fact that this chamber, though partly blocked with earth, has been accessible for centuries; one cannot imagine plunderers removing every stone. It is thus highly possible that even if there had been any intention to line and roof this chamber, it was never carried into effect. The pit in the centre of the floor and the two big bases lying by side of it may have been the beginning of a rectangular pillar to help support the ceiling. This seems the most reasonable explanation.

This side chamber if one can judge by the grave-pit found in the floor and by the analogy of the chamber-tombs, was probably intended to be used as a charnel chamber to receive the remains of earlier interments when the main chamber (the tholos) was being prepared for a fresh burial. It thus served as a kind of elaborate substitute for the grave-pits in the Lion Tomb and Tomb of Genii. It corresponds to the similar side chamber in the Treasury of Minyas and to the small chambers in Tomb 518 and in some of the tombs found by Tsountas.<sup>2</sup> The large tomb found recently by the Swedish Expedition at Asine has two or three side chambers.<sup>3</sup> The procedure seems to have been that the bodies were first laid in the

<sup>1</sup> *Mycenae*, p. 46.

<sup>2</sup> 'Εφ 'Αρχ. 1888, pp. 145 ff..

<sup>3</sup> Persson, *Bull. de la Soc. Roy. des Lettres de Land*, 1922-1923, p. 34.

main chamber, and remained there till it was necessary to reopen the tomb for another interment. Then the skeleton of the first tenant with the funeral offerings which had been laid around him were removed to a pit in the side chamber, or merely piled up in a heap in one corner.

Apparently it was during the process of removal that the relatives of the deceased took away any of the funeral offerings that pleased them.<sup>1</sup> As will be seen in the account of the Kalkani cemetery, the tombs there had suffered not from disturbance in post-Mycenaean times, but from repeated partial plundering by the members of the family themselves when the tombs were being prepared for later interments. The same customs would have been followed, only with more elaboration, in the case of the royal tholos tombs, and so it is not surprising to find in the two most elaborate of them all, the Treasury of Atreus and the Treasury of Minyas at Orchomenos, which is similar in construction and probably almost contemporary,<sup>2</sup> the addition of a side chamber found elsewhere only in the larger private chamber-tombs.

#### *Date.*

Architecturally, both from the character of the masonry and the somewhat sparing use of the saw, this tomb resembles the Lion Gate and the ashlar masonry near it. One is strongly tempted to assign them to the same period. It would not be at all unlikely that the king who re-fortified and extended the citadel and rebuilt the palace, should have built this great tomb for himself and his family. The tholos tomb-building kings of Mycenae may thus be compared to the much earlier pyramid-building kings of Egypt. The Lion Gate falls early in L.H. III., and it is very like the gate at Tiryns, which again is L.H. III. though somewhat later. In the evolutionary series of the tholos tombs the Treasury of Atreus, as we have seen, comes next to the Lion Tomb, which we have dated on quite independent evidence to the latter part of L.H. II. Thus on architectural grounds alone one would expect this tomb to fall at the beginning of L.H. III.; which, to judge by the Lion Gate, Palace and Citadel, was a period of great building activity. Such a date, far from clashing with the further evidence provided by Stamatakes' finds or by our own under the threshold and in the dromos, agrees excellently. We

<sup>1</sup> Cf. Tsountas in *Πρατικά*, 1896, p. 30.

<sup>2</sup> Though the saw was more freely used there than in the Treasury of Atreus.

can then assume with confidence that the Treasury of Atreus should be dated to the beginning of the Third Late Helladic period.

*Finds.*

*A. Stamatakes' Excavations.*

I. The Dromos.

82.<sup>1</sup> Twelve fragments of stone vases. Six pieces come from base, sides and lid of round stone pot (walls .025 m. thick) of grey-green stone with white veins. Round the base run two shallow grooves; sides are pitted with shallow round holes for insertion of some inlay. Another piece of similar stone (.03 m. thick) well polished outside, also from a large round vessel; one small piece of a well-made and polished vase of serpentine with thin walls (.01 m. thick); one piece of pink-and-white veined limestone (.02 m. thick) with shallow round holes on outside for insertion of inlay; two small fragments from stone vases of indeterminate character; one amorphous piece of stone, possibly not an artifact.

83. Four stone implements; one is now No. 5376 of the National Museum inventory, and part of butt of bored hammer celt, probably of early Bronze Age; length .065 m., width .065 m.

84. Eleven fragments of terracotta figurines of women of ordinary Mycenaean types, similar to those figured by Schliemann, *Mycenae*, Pls. A-C: L.H. III.

85. Four fragments of terracotta figurine of animals of ordinary Mycenaean style (L.H. III.) similar to those figured by Schliemann, *Mycenae*, Pl. D.

II. The Doorway.

86. (1193) Many fragments of thin gold foil undecorated.

87. (1192) More fragments of thin gold foil undecorated.

88. (1198) Eight gold ornaments as follows (Fig. 74):—

(a) Piece of gold leaf with impressed pattern of volute or lotus-flower type: edges are bent over; so this was probably part of gold covering for ornament of glass paste, wood or some other perishable material; length .03 m.

(b) Small rosette of gold leaf, pierced round edges with four holes for attachment: edges raised, and so this, like 88a, probably once covered an ornament of perishable character; diam. .005 m.

(c) Small piece of thickish gold leaf, curved and pierced at each end for attachment: two or three sunk lines at one end, which is broken: length .013 m.

(d) Part of strip of narrow gold leaf: narrow raised border: embossed

<sup>1</sup> Since not all these finds have yet been entered in the inventory of the National Museum at Athens, we have retained the numbering of an old inventory made when the objects were transferred to the National Museum. The numbers in brackets are those of the current National Museum inventory.

with a design of spirals and lotus-flower, a pattern common in frescoes of Tiryns<sup>1</sup> and Mycenae,<sup>2</sup> and on ceiling of side chamber of Tholos Tomb at Orchomenos.<sup>3</sup> No holes for attachment visible, so perhaps this covered one side of wooden casket; length .03 m.

(e) Small hollow gold bead, undecorated; composed of two pieces soldered together at the middle; diam. .005 m.

(f) Circular piece of gold leaf with circle in relief in centre; edges turn over a little, and so like (a) and (b) it was probably covering of some ornament in perishable material; diam. .015 m.

(g) Circular piece of gold leaf with edges turned over like (a), (b) and (f): an embossed pattern which is much damaged but seems to have consisted of three spirals joined together; diam. .02 m.

(h) Quatrefoil-shaped hollow gold bead, made of two pieces of metal

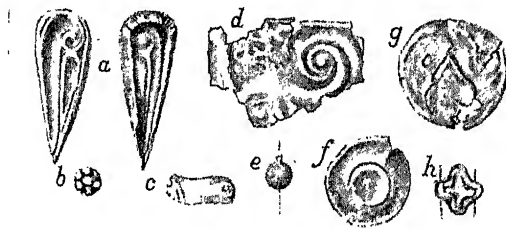


FIG. 74.—TREASURY OF ATREUS: GOLD WORK FOUND BY STAMATAKES.  
(Scale 2 : 3.)

soldered together: pierced for threading on a necklace as shewn: in centre is cross-like design in relief; width .01 m.

89. (1195) A number of fragments of thin gold foil undecorated.

90. (1194) A number of fragments of thin gold foil undecorated.

91. (1202) Ornaments of glass paste, where no other material is specified (Fig. 75):—

(a) Trochus-shell in white vitreous paste; diam. .02 m., height .015 m.

(b) Small snail in green marble, well carved and polished; diam. .01 m.; similar to that found under the threshold.<sup>4</sup>

(c), (d) Snails similar to (b), but of soft grey vitreous paste; diam. .01 m.

(e) Large bead, shaped on each side like a flattened cone, with ribbed ornamentation on both sides; diam. .02 m.

<sup>1</sup> Rodenwaldt in *Tiryns*, ii. Pl. VII. pp. 47, 176.

<sup>2</sup> See above, p. 169, Pl. XXIX.

<sup>3</sup> Tsountas-Manatt, *Mycenaean Age*, p. 128, Fig. 48; cf. the decoration of the palaces of Amenhotep III. at Thebes, *Bull. Metrop. Mus. Art. N.Y.*, 1918, Egyptian Supplement, p. 12, Fig. 8, and of Akhenaten, Petrie, *Tell el Amarna*, Plate X. 2; and Fimmen, *Kretisch-Mykenische Kultur*, p. 201.

<sup>4</sup> See below, p. 356.

- (f), (g) Two small beads similar to (e); diam. .01 m.  
 (h) Small cockle-shell in blue-green vitreous paste; length .007 m.  
 (i) Portion of rosette in same material as (h).  
 (j) Button (?) much decayed of greenish vitreous paste; diam. .025 m.  
 (k) Pendant of dark blue glass paste, with long perforated shank and round flattened base, which is plain underneath but has edges ribbed with leaf pattern; diam. .02 m., length .015 m.<sup>1</sup>  
 (l) Small rosette ornament with ribbed attachments above and below perforated for threading; length .012 m.  
 (m) Half of bead from necklace; it originally consisted of two lily buds set obliquely to one another; perforated at side for threading; length .01 m.  
 (n) Half of small ornament in paste, with scale pattern; unperforated, but otherwise would have been a substitute for a gold ornament such as that

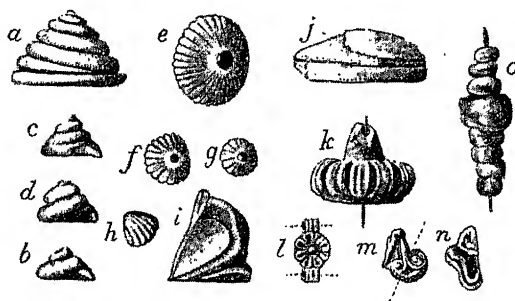


FIG. 75.—TREASURY OF ATREUS: SMALL ORNAMENTS FOUND BY STAMATAKES.  
 (Scale 2 : 3.)

found in the pit in the dromos of the Tomb of Clytemnestra (Fig. 79); length .012 m.

92. More than twenty beads of glass paste; not yet identified in the Museum.

93. (1200) Eight beads of carnelian (Fig. 75, o); one large, seven small; diam. .005–.01 m.; all very roughly made and unpolished and irregular. A similar bead (diam. .08 m.) was found by us on the floor of the tholos in 1920 and others under the threshold.<sup>2</sup> Several similar beads were found with the eleventh interment in Tomb 517, which had a Tell-el-Amarna stirrup vase by it, and so is to be dated to the beginning of L.H. III.

94. Five objects of bronze. Two rings about .02 m. in diameter; thick bronze rod .08 m. long, diam. .01 m., broader at the one end and with a knob

<sup>1</sup> This ornament is common in the Menidi and Spata tombs; Lolling, *Kuppelgrab bei Menidi*, Pl. III. 23; *B.C.H.*, 1878, Pls. XIII.–XIX.

<sup>2</sup> P. 357, No. 6.

at the other, possibly not antique; small shapeless piece of bronze; head of small dart, .05 m. long; none of these seem to be certainly Mycenaean.

95. Seven objects of stone: four pieces of alabaster vases (.015-.025 m. thick), probably of baggy type common in eighteenth Egyptian dynasty,<sup>1</sup> and not unknown in Minoan and Mycenaean tombs: one fragment of circular lid in serpentine (.01 m. thick) with ledge round rim to fit lip of a vase, and with top upper surface decorated with shallow concentric grooves: one small conical whorl of steatite and a chip of same material triangular in section.

96. One boar's tusk, unworked and broken.

97. Thirty-seven (four now missing) vase fragments. One is part of a rosette from an Ephryaeon goblet, but the remainder are all pieces of ordinary L.H. III. pottery, of the usual patterns and shapes. One piece is from a deep bowl with a pattern similar to that of the piece found by us under the threshold.<sup>2</sup>

98. Twenty-two vase fragments all pierced with holes (one missing), all L.H. III. except two Middle Helladic; of latter one is lid of a matt-painted vase (Group B.1) pierced with pair of small holes on opposite sides to secure it, the other a matt-painted piece of same class with a hole drilled through it; of the L.H. III. fragments seven are bases of vases, of which six have a hole in the centre and may belong to some kind of rhyton, although two of the six are painted on the inside, and the seventh has a hole at the side. One is a piece of a broken pot mended with lead rivets. Two pieces have perforated lugs. Two pieces have spouts of small bore. One is a fragment of a handle pierced to ensure complete firing. Two are potsherds chipped into round discs and pierced through the middle, perhaps for use as whorls. The remaining four are sherds which seem to have been perforated at haphazard.

99. Seventy unpainted vase fragments; not yet identified.

100. (1342) Eight (now five) objects of terracotta; one unpainted, perforated disc: four painted, two are legs of chairs (?), one is the head of an animal, one is the leg of a large horse probably harnessed to a chariot; the latter is covered with red lines of paint, has added details in white, and is pierced to ensure proper firing.

101-104. Lumps of earth and ash, and a few broken bones.

### B. *British School's Excavations.*

#### Under the Threshold.<sup>3</sup>

1. Part of rosette (?) of bronze much decayed; .03 × .03 m.
2. Nine bronze nails or fragments thereof (Fig. 76, *h*); some have pieces of gold foil attached, so possibly they were wrapped with gold; .03-.05 long.
3. Part of blade of bronze; .05 m. long.
4. Small cockle-shell in vitreous paste; .015 m. diam. Fig. 76, *f*.
5. Small snail in green stone similar to No. 91 (*b*), (*c*), (*d*) above, .007 m. high. Fig. 76, *g*.

<sup>1</sup> See above, p. 336.

<sup>2</sup> See below, p. 357, No. 9.

<sup>3</sup> See p. 348, above.

6. Two small flat carnelian beads, very rough and irregular, like those under No. 93 above; .007-.01 m. diam.; ordinary L.H. III. type. Fig. 76, *c, d*.

7. Two beads of vitreous paste, shaped on either side like a flattened cone and with ribbed ornamentation on both sides; compare No. 91 (*e*) above; .009 m. diam.; common L.H. type. Fig. 76, *e*.

8. A flat lentoid bead of blue stone not carved; .001 m. long. Fig. 76, *i*.

9. Three potsheds; first (Fig. 76, *a*) part of deep bowl with characteristic early L.H. III. pattern like sherds from first stratum in Lion Gate section;<sup>1</sup> second (Fig. 76, *b*) part of shallow unpainted bowl with horizontal ribbon handles; third part of simple horizontal band from body of a vase.

10. A few fragments of ivory rotten with damp.

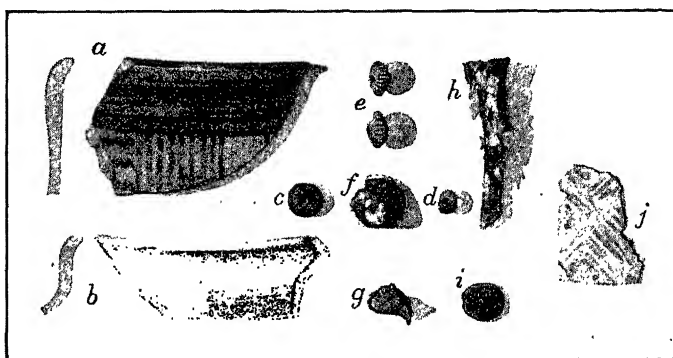


FIG. 76.—TREASURY OF ATREUS: SMALL ORNAMENTS, GOLD LEAF, POTTERY, ETC., FOUND UNDER THRESHOLD. (Scale 2:3.)

11. A quantity of gold foil; most undecorated and much crumpled: one oblong piece decorated with St. Andrew's Cross design, see Fig. 76, *j*, and pierced along edges for attachment to garments; length .03 m.

#### B. THE TOMB OF CLYTEMNESTRA (Pl. LVIII.).

The proper excavation of this tomb was begun by Mrs. Schliemann in 1876, but it was left unfinished at the close of her husband's famous campaign. Tsountas continued the work in 1891 and 1892, but did not actually finish the clearing of the tholos and dromos till 1897.<sup>2</sup> Since then repairs have been carried out on the tholos to support the damaged walls, and the dromos has been strutted with heavy baulks of timber, as the walls, owing to the seepage of water in the rock and earth behind, were bulging in a dangerous manner. The doorway, which was also threatening

<sup>1</sup> Cf. Pl. V. *e* from Stratum II. by Lion Gate in contrast with Pl. V. *f*, a late deep bowl from the Granary.

<sup>2</sup> *Πρακτικά*, 1891, pp. 19 ff.; 1892, p. 57; 1897, p. 25.



to collapse for the same cause, has been securely supported with steel work. We planned and measured the tomb in 1922, but beyond doing a little clearing to facilitate the measuring did not otherwise re-examine the tholos. In the previous year we had made one or two tests beneath the walls of the tholos in the hope of finding potsherds to assist in determining the date of the tomb.

*The Dromos (Pl. LVIII.).*

The dromos is about 37 m. long and 6 m. wide. It is closed at its entrance or south end by a wall of small rectangular blocks of poros, now not more than four courses high and one stone thick. This wall rests on the extreme ends of the lining walls of the dromos, and runs beyond them east and west for about 4 m. in either direction. This extension ends on the west with a conglomerate block, and seems to have been intended to prevent earth from the hillside from being carried down on the open level space before the entrance. At the end of the east wall of the dromos there is as part of this extension a pier of ashlar masonry or poros four courses high, the exact purpose of which cannot now be determined. It may have been built with some intention of helping to prevent free access to the dromos, but, since it would have been perfectly easy to leap down over the low dromos wall behind it, it could not have been very effective in its present condition. The wall that blocks the end of the dromos and the extensions on either side do not bond together. Probably the blocking wall of the dromos itself was so made that it could be easily taken down when the tomb was reopened and could be replaced later. This closely resembles the remains of the walls across the end of the dromos of the Treasury of Atreus and that of the Tomb of Genii.

The dromos is lined throughout with massive walls of ashlar work in conglomerate. The blocks are on the whole smaller than those in the dromos of the Treasury of Atreus; the majority are hammer-dressed, but towards the façade some are sawn. The walls of the dromos for the most part bond in with the façade, in this respect unlike the Treasury of Atreus.

On the western side of the dromos at the north end just before the façade Tsountas found a grave-pit <sup>1</sup> which is 3 m. long by 1.20 m. wide, and about 1 m. deep. In this he found several important and valuable objects which are detailed below.<sup>2</sup>

<sup>1</sup> Πρακτικά, 1892, p. 57.

<sup>2</sup> Pp. 368 ff.

*The Façade* (Pl. LVIII., Fig. 77).

The façade<sup>1</sup> of the tomb is constructed of ashlar work in conglomerate, and all the blocks are sawn. There is a double frame or fascia running up either side of the doorway and across the face of the outer lintel.



FIG. 77.—TOMB OF CLYTEMNESTRA: FAÇADE.

On both sides of this frame stood half-columns of gypsum, engaged against the façade; their diameter is .39 m. They stand on semi-circular bases of finely cut and polished conglomerate. These bases are in two parts, the upper half, .14 m. high, forming what we may call the lowest drum of the column, of the same diameter, and like it fluted, the lower .11 m.

<sup>1</sup> Cf. Durm, *Jahreshefte*, x. pp. 59 ff.

high, plain and projecting .03 to .04 m. from the upper (diameter .45 m.); both parts are made in one piece. The base rests on a foundation stone of roughly-worked conglomerate (below the level of the floor) which measures .46 m. wide (equal to the diameter of the base), .40-.45 m. deep, and .15 high. The columns are fluted, with thirteen flutes, and were crowned with capitals which, to judge by one fragment preserved in the National Museum at Athens, resembled those of the Treasury of Atreus. Above each of the capitals a square plinth of sawn conglomerate projects from the façade, and forms a kind of extra abacus. The nearest parallel to these columns is provided by the engaged half-columns on either side of the northern entrance from the Great Court at Phaistos.<sup>1</sup> Unfortunately, the exact date of those columns cannot be ascertained, but there are fluted columns in the Little Palace at Knossos which dates from L.M. II.<sup>2</sup> Between the secondary capitals a frieze of bluish limestone runs across above the lintel. It is decorated with a row of circles in imitation of the beam-ends of the primitive wooden construction. Above this ran another frieze of grey greenstone adorned with an elaborate spiral pattern<sup>3</sup> which is exactly similar in material and design to a frieze found in the megaron at Tiryns,<sup>4</sup> which dates from L.H. III. Above the lintel is a tall relieving triangle, originally masked as in the Treasury of Atreus by ornamental work in coloured stone. Apart from this the upper part of the façade seems to have had no veneer of carved coloured stone like the Treasury of Atreus, since no dowel-holes exist for its attachment. The only attempt to ornament it is provided by two rectangular pilasters on either side above the extra abaci, which run right up to the very top of the façade. These bond in with the rest of the upper façade and project very slightly in comparison with the engaged half-columns below.

*The Doorway and Threshold (Pl. LVIII.).*

The doorway is about 5.40 m. deep by 2 m. wide and about 5.40 m. high. It inclines inwards towards the top. It is built throughout of good ashlar work of carefully sawn blocks of conglomerate, and roofed with three massive slabs of the same material, also sawn. In the under

<sup>1</sup> *Mon. Ant.* xii. p. 56; xiv. p. 363, Fig. 19.

<sup>2</sup> Evans, *Tomb of Double Axes*, etc., p. 62 ff., Figs. 76, 77.

<sup>3</sup> Perrot-Chipiez, *op. cit.* vi. p. 626, Fig 274 (lowest piece); *Практика*, 1891, p. 19.

<sup>4</sup> Schliemann, *Tiryns*, Pl. IV. p. 292.

side of the central slab are two pivot-holes, one on either side, for the insertion of a door. Below them in the rock-cut floor is set a threshold composed of two sawn blocks of conglomerate. These threshold slabs were put in on the same wedge principle as that observed in the Treasury of Atreus. On the inner side of the threshold a small ledge is cut for the double door to rest against. In the ledge four holes are bored which probably were intended to help to fix in its place an extra threshold of some other material, just as in the Treasury of Atreus. This was probably of bronze or of wood covered with bronze, because green stains of bronze are still visible in places on the upper surface of the threshold stones. The fitting of an extra or upper threshold over the conglomerate slabs would explain the absence of pivot-holes, as they would naturally have been made in the bronze and wood. In the side walls of the doorway there are two shallow vertical cuttings on each side corresponding exactly with the width of the threshold. These were clearly intended to hold in place a door-frame, which was probably of wood, and have been covered with bronze. The care taken to fit the double door into the tomb is further illustrated by the sinking in the under side of the middle and inner lintel-blocks to allow the doors to open easily. Although so much care was taken to fit a door to this tomb, yet on excavation the entrance was found blocked with a wall of poros about 5 ft. high,<sup>1</sup> the outer face of which was practically flush with the façade. This wall is visible in old photographs of the tomb,<sup>2</sup> but no measurements or details of its construction are available, as it has long since been removed. It appears to have been of rough ashlar work.

*The Tholos (Pl. LVIII.).*

The tholos is about 13.40 m. in diameter, and was probably of the same height, so far as can be calculated. It is built throughout of ashlar work of conglomerate. Here as in the dromos the construction of the tomb, in contrast to the massive impression of the Treasury of Atreus, seems to be refined and careful. This effect is produced by the use of somewhat smaller stones carefully fitted together and for the most part sawn. But while the rest of the stone-work is relatively small, a line of big blocks is carried round the tholos at the same height as the gigantic lintel-block,

<sup>1</sup> Tsountas-Manatt, *Mycenaean Age*, p. 124.

<sup>2</sup> Perrot-Chipiez, *op. cit.*, vi. Fig. 118.

making a kind of frieze. The insertion of these big blocks at this height would present no extra difficulty when it is remembered (see p. 280 above) that it was the practice for the builders of tholos tombs to make the level of the lintel the same as the level of the original hillside, so that the big lintel slabs could be easily rolled or slid into position. Also the insertion of this line of big blocks at the same level as the lintel would help the latter to carry the superstructure and so relieve the door-jambs of the lateral thrust that has been fatal to the entrances of the Cyclopean Tomb, the Epano Phournos and the Tomb of Aegisthus. The line of big blocks would equalise the pressure at this level, and enable the upper part of the dome to be built as though from a new ground surface. Below this level the inclination of the walls does not exceed that at which a straight wall could stand if corbelled out as done here, but above this point the inclination is such that the stones can only be maintained by arranging them in horizontal rings where, on the principle of the arch, their own weight and that superposed only holds them the tighter in place.

Speaking generally, this tomb is an elegant version of the Treasury of Atreus. But the very care with which the stones were sawn and fitted has contributed in part to its destruction. Conglomerate, though a hard and heavy stone, is apt from its very structure to have concealed faults. These flaws, which would be likely to spring open if the stone were hammer-dressed, are not revealed by the more gentle process of sawing. Thus the flaws only expose themselves after weathering or when the stone has been subjected for some time to heavy pressure. This can easily be seen both in the façade and in the tholos of this tomb.

The inner side of the relieving triangle over the lintel is masked with well-fitted blocks of conglomerate which seem to have been wedged in. This tomb, like the Treasury of Atreus, is built in a circular excavation in the rock, and the sides of this excavation are not absolutely vertical but incline slightly inwards. The blocks with which the vault is built have great depth but narrow frontage. The depth made it easier to counterweight them by means of a heavy packing of undressed stone. The narrow frontage by increasing the number of joints insured a better horizontal arch construction, since the triangles intervening between the rectangular stones were long and narrow and so more easily wedged with small stones.

At the top of the portion of the vault preserved on the east the facing

stones and the packing (3.10 m. thick) are together 4.00 m. thick, or only 1 m. less than the distance between a perpendicular dropped from the inner edge of the vault at this point and the inner face of the wall of the tholos on the ground level. To judge by the French expedition's account the Treasury of Atreus was built in a similar manner.

In the northern sector of the tholos there is a roughly oval pit cut out in the rock floor as a collecting basin for the water which oozes from the rock in this tomb. From this pit a drain runs out under the threshold through the doorway and down the dromos, gradually inclining eastwards. It passes under the blocking wall of the dromos and runs out on the hillside well to the south-east of the dromos. The drain is cut in the rock and lined with low rubble walls and roofed with small slabs, above which two stones are set to form a relieving triangle to take the direct pressure off the covering slabs.

The top of the dome seems originally to have projected above the hillside and was covered with a mound of earth according to Stamatakes.<sup>1</sup>

#### *Finds.*

##### *A. By Mrs. Schliemann.*

During her excavations in this tomb Mrs. Schliemann found the following objects which are now in the National Museum at Athens. Since all of them have not yet been entered in the Museum Inventory, we have retained here the numbering of an old inventory made at the time when they were transferred to the National Museum. The numbers added in brackets are those of the existing Museum Inventory. There is no proof that any of them belong to the original sepulchral deposits of the Tomb.

65. (1197) Rosette of thin gold leaf, pierced round edges and much crumpled; Fig. 78, *a*; .035 m. in diameter; perhaps the gold leaf mentioned by Schliemann, *Mycenae*, p. 140.

66. (1421) Two glass beads; one (Fig. 78, *b*; diam. .02 m.; Schliemann, *Mycenae*, Fig. 205) of white glass paste with narrow perforation filled with remains of fine bronze wire, clearly part of same necklace as the five amethyst beads (No. 67, Fig. 78, *d*, as stated by Schliemann, *ibid.* p. 120). The other (Fig. 78, *c*; diam. .098 m.; Schliemann, *ibid.* Fig. 209) is of dark glass paste, and perforation is very wide, so that it does not seem to have formed part of the same necklace.

67. (1199) Five polished amethyst beads (Fig. 78, *d*; diam. .012–.018 m.; Schliemann, *Mycenae*, Figs. 206–208) with very narrow perforations, strung on thin bronze wire. As stated by Schliemann these formed part of a necklace

<sup>1</sup> *Ath. Mitt.*, 1878, p. 272.

to which the first bead under No. 66 also belonged. The gaps between the amethysts are probably due to the decay of paste or amber beads.

68. Three fragments of stone vases: first very small, and lower end of handle of a vase of serpentine (·01 m. thick): second is part of body of a large vase in serpentine (·023 m. thick): third (·02 m. thick) is part of side of a vase in black and white stone with plaited basket or leather work pattern on outside and ornamented irregularly with small drill-holes for inserting some inlay: it may well be Cretan: in Crete stone vases similar to this fragment are dated to Middle Minoan III.

69. Five strips of thin bronze plate (·025-·035 m. wide and ·12-·16 m. long): Schliemann, *Mycenae*, p. 141.

70. (1201) Small lead figurine of woman (·05 m. high) in round; archaic Greek work; similar to figurines (unpublished) from Argive Heraion and Orthia Sanctuary at Sparta; another has been seen in possession of a boy at Philous.

71. (1370) Nineteen fragments of terracotta figurines: six are archaic Greek; one is Schliemann, *Mycenae*, Pl. XIX. No. 106; another a rider, is Schliemann, *ibid.* Pl. XIX. No. 110; portions of two more riders and a female figure similar to those from the Argive Heraion<sup>1</sup> and Tiryns:<sup>2</sup> thirteen are fragments of ordinary Mycenaean (L.H. III.) figurines, mostly women of usual types (two doubtful); compare Schliemann, *ibid.* Pls. A, B, C.

72. Twenty pieces of terracotta figurines of animals: fourteen of ordinary Mycenaean (L.H. III.) types, like those figured by Schliemann, *ibid.* Pls. A, D: six are archaic Greek and probably fragments of horses.

73. Seventy-four miscellaneous vase fragments:—

Middle Helladic, one polychrome fragment with design in pale cherry-red and white on black ground; from neck of a vase near the handle or spout; very similar to polychrome sherds alleged to be from Fourth Shaft Grave;<sup>3</sup> probably of latter part of Middle Helladic age.

Late Helladic I.; three fragments: first from cup of Vaphio or Keftiu shape with raised band round middle and pattern of vertical grained lines;<sup>4</sup> second, small piece of vase with double-axe device like vases from First Shaft Grave,<sup>5</sup> and others from Tombs 516 and 518, and with added white dots; third, fragment of large amphora of so-called Palace Style decorated with floral pattern similar to that of vases<sup>6</sup> from First Shaft Grave and Tholos Tomb near Messenian Pylos;<sup>7</sup> a fragment from Mycenae with same pattern is in Nauplia Museum, but its exact provenance is unknown.

Late Helladic II.; four pieces of alabastra, ordinary specimens of period

<sup>1</sup> Waldstein, *Argive Heraeum*, ii. Pls. XLII.-XLV.

<sup>2</sup> Tiryns, i. Pl. I. ff.

<sup>3</sup> Furtwängler-Loeschcke, *Myk. Tongefässe*, Pl. VI.

<sup>4</sup> Cf. Blegen, *Korakou*, p. 46, Fig. 62 (10), Pl. IV. 6.

<sup>5</sup> Furtwängler-Loeschcke, *op. cit.* Pl. III. (10, 11).

<sup>6</sup> 'Εφ. 'Αρχ. 1914, Pl. II. 1, 3.

<sup>7</sup> This is an example of a Palace Style amphora which is earlier than L.H. II.

like those from Tomb 515, though perhaps not quite so good in style, and two sherds with floral patterns, one with rosette or flower from Palace Style amphora, the other with part of ivy-leaf design from large jug.

Late Helladic III.; forty-six pieces: one is from large late alabastron with wave pattern bordered by dots; one part of stirrup vase of Tell-el-Amarna style, one piece from jug of metallic shape covered with network pattern, one

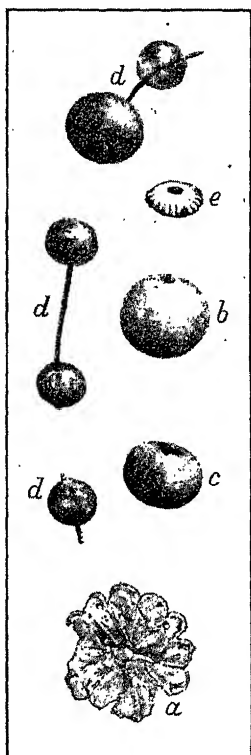
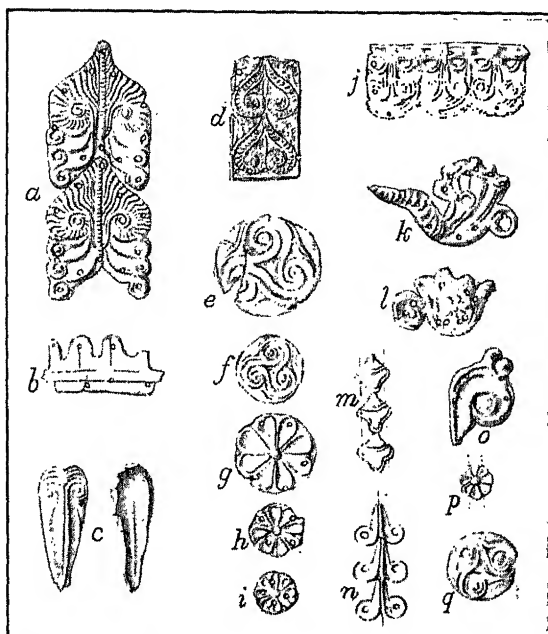


FIG. 78.—BEADS, ETC.,  
FOUND BY MRS. SCHLIE-  
MANN. (Scale 1 : 2.)



FIGS. 78, 79.—TOMB OF CLYTEMNESTRA.

FIG. 79.—GOLD WORK: *a, b, d-p*, FOUND BY TSOUNTAS  
IN GRAVE-PIT IN DROMOS; *c, q*, FOUND BY BRITISH  
SCHOOL. (Scale 1 : 2.)

fragment of kylix stem, one piece of rhyton with murex pattern, two sherds of large krater similar in shape to the Warrior Vase, with design in black and yellow, like the fragment Athens Nat. Mus. 4691,<sup>1</sup> which was found above east side of dromos of Tomb of Clytemnestra; all three pieces probably belong to same vase. The remaining sherds call for no comment, as they are ordinary L.H. III. ware, some early in appearance, some late, and there are a few pieces

<sup>1</sup> Rodenwaldt, *Fries d. Megarons*, p. 24, Fig. 14.



possibly of the 'Close Style';<sup>1</sup> they are mostly from bowls of varying shapes,<sup>2</sup> but jugs and mugs also occur.

Geometric, twelve sherds all of ordinary well-developed style and similar to the Geometric pottery from Tiryns.

Classical Greek, four sherds; two are late Corinthian and one red-figured.

74. (1308) Three fragments of kraters of Warrior Vase shape with representations of animals; one a horse, one a bird and one too broken to be identified; all ordinary L.H. III. ware.

75. Four unpainted vase fragments; two pieces of coarse domestic ware, one piece of pale grey Minyan ware with incised line, one piece of coarse indeterminate incised ware.

76. (1215) Seventy-one fragments of Geometric pottery, all of ordinary well-developed style similar to that from Tiryns and Asine.<sup>3</sup>

77. (1307) Twelve sherds of Geometric pottery of well-developed style like that under No. 76, with patterns of birds or horses, latter being the rarer.

78. Four whorls, one of stone, two of clay and one of lead: not yet identified.

79. (1382) Bead of glass paste, yellowish, with deeply incised ribs on both sides, radiating from perforation; Fig. 78, *e*; diam. .015 m.

80. Small Corinthian aryballos, figured by Schliemann, *Mycenae*, Fig. 80.

81. Small fragments of moulded black glazed ware shewing parts of two female figures; Hellenistic.

To these we must add the following:

Nat. Mus. 1302. Three fragments of good L.H. III. ware illustrated by Schliemann, *Mycenae*, Pls. XX., XXI.; of these No. 202 is a typical L.H. III. cup descended from L.H. I. cups like those from Korakou (*Korakou*, Figs. 51, 2, 3). Cups of this L.H. I. shape are metallic in form, and occur in Tombs 517, 518 and 529, and there is an example in silver from Knossos.<sup>4</sup> The other sherds shewn by Schliemann in Pls. XX. and XXI. are all ordinary well-developed Geometric pottery like that under Nos. 76 and 77 above.

#### B. In 1913.

During the repairs to the tomb in 1913 the following fragments of vases and other objects in stone were found:—

Four pieces of a large vase of red stone, .06 m. thick, with a heavy moulded rim (.075 m. wide), but otherwise undecorated, probably part of a pithos like that described below.

One fragment of gypsum carved with a spiral pattern with the angles

<sup>1</sup> Blegen, *Korakou*, pp. 61, 62, Fig. 86.

<sup>2</sup> Blegen, *op. cit.* Figs. 83–86, 91; cf. *B.S.A.* xvi. Pl. I.

<sup>3</sup> W. Müller-Oelmann, *Tiryns*, i. pp. 135 ff.

<sup>4</sup> From the South House, Gilliéron, *Nachbildungen Myk. u. Minoischer Altertümer*, Pl. XXIII. (122).

filled in with a plaited design, perhaps from the capitals of the engaged columns on either side of the doorway.

Piece of round undecorated vase of serpentine (·045 m. thick), resembling one of the fragments under No. 68 above.

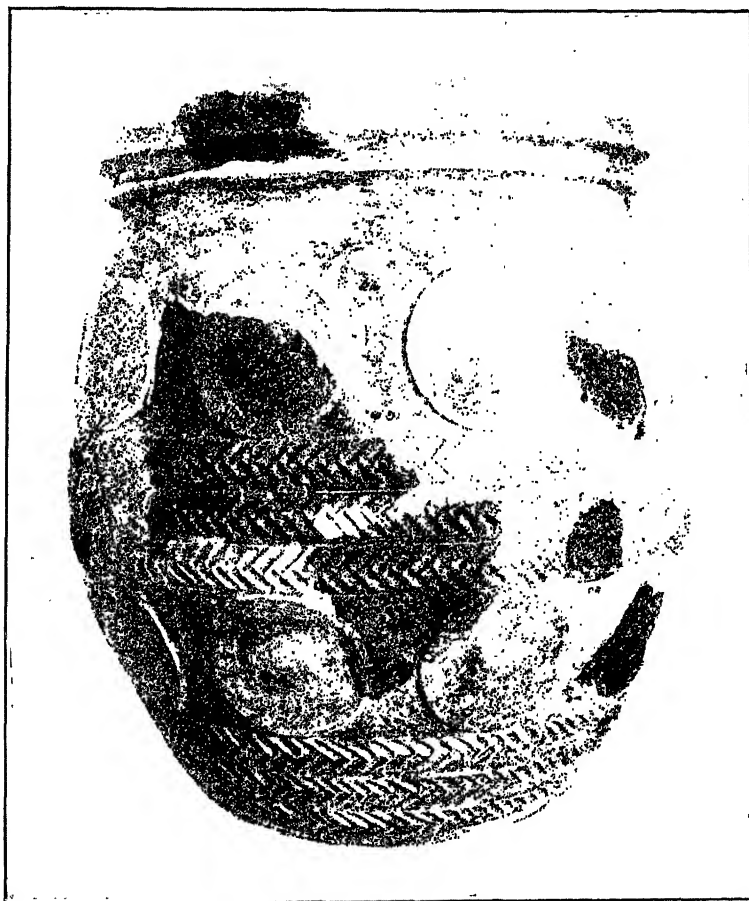


FIG. 80.—TOMB OF CLYTEMNESTRA: STEATITE JAR, RECONSTRUCTED. (Scale 1 : 8.)

Two pieces of alabaster vases of the usual baggy Egyptian type common in the Eighteenth Dynasty; many specimens have been found in Crete and at Mycenae.<sup>1</sup>

One piece of a fluted vessel of black-and-white veined stone rather crystalline, possibly part of a large funnel-shaped rhyton as the flutes narrow towards one end.<sup>2</sup>

<sup>1</sup> See above, pp. 336, 356.    <sup>2</sup> Cf. *B.S.A.* xxiv. p. 201, Pl. XI., see above, pp. 1, 183.

One fragment of a three-legged mortar of volcanic stone, possibly Hellenistic.

Fragment of a bored celt.

Piece of a whetstone red in colour.

Shapeless stone polisher.

Finally, there were thirteen pieces of large vessels of the pithos type, in dark green steatite. Mrs. Schliemann had previously found eight pieces of this vase.<sup>1</sup> Some of these pieces join together and there are thus fifteen fragments in all. Ten belong to a large vessel (Fig. 80) decorated with two rows of medallions in relief set between triple bands, also in relief, of rope-work pattern; at intervals between the bands are holes bored for the attachment of vertical loop-handles. The holes, which are always in pairs, go right through the side of the vase. The other five fragments belong to a similar vase slightly smaller and with slight differences in the medallions and rope-work, and the holes for attaching the handles are bored obliquely so that they meet about half-way through the thickness of the stone. The greatest thickness of the walls is .045 m. and the heavy-moulded rim is .05 m. wide. These pieces come without doubt from imitations in stone of one of the large medallion pithoi of Knossos,<sup>2</sup> which belong to the transitional period at the end of M.M. III. and the beginning of L.M. I. No previous examples of this type of pithos in any material have been found on the mainland, so one is at a loss to date them. They would certainly be later than the Cretan originals in clay,<sup>3</sup> because copies must be later than the originals and it was an ambitious proceeding to attempt to imitate such a pithos in stone. Still such ambitious stone-work of this type corresponds well with the character of the Treasury of Atreus and the Tomb of Clytemnestra with their façades of elaborately carved stone of many colours. It is a distinct attempt on the part of the Mycenaeans to outdo their Cretan teachers. We may therefore attribute these vases to the beginning of L.H. III., when this tomb and the Treasury of Atreus were built. In any case the vase cannot be earlier than L.H. II., as stone vases are excessively rare in the Shaft Graves; the supposition that an L.H. II. vase was placed in an L.H. III. royal tomb as a kind of heirloom would cause no difficulty.

#### C. By Tsountas.

In 1892 in the grave-pit in the dromos Tsountas found the following objects which he thought belonged to the grave of a woman.<sup>4</sup> That a grave-pit should be found in the dromos indicates that secondary interment was practised in this tomb, as in the Lion Tomb and Tomb of Genii. These objects would have belonged to a burial that was removed from the tholos to make room for

<sup>1</sup> One is illustrated by Schliemann, *Mycenae*, Fig. 215.

<sup>2</sup> Evans, *Palace of Minos*, i. p. 563.

<sup>3</sup> At Phylakopi Melian imitations of L.M. I. ware were found together with imported L.M. II. vases, *B.S.A.* xvii. p. 14.

<sup>4</sup> *Πρακτικά*, 1892, pp. 56 ff.

a fresh interment there. They may therefore be considered with some justice as belonging to one of the earlier interments in the tomb. This being so, their relatively late date, the beginning of L.H. III., so far as objects of this type can be dated, is of some importance in attempting to determine the earliest possible date for the tholos. These objects are:—

1. (Nat. Mus. 2898) Bronze mirror, circular (·19 m. in diam., ·004 m. thick), with carved ivory handle.<sup>1</sup> Pl. LIX. A.

This, which is cut out of one piece of ivory, consists of a round handle (·115 m. long) surmounted by a flat plate (·025 m. thick) with a deep slit along the top into which the bronze mirror is inserted. The mirror was fastened into the handle by pegs either of wood or of ivory<sup>2</sup> (certainly not bronze or there would be some discoloration of the ivory), their heads studded with lapis lazuli surrounded by granulated gold bonding.<sup>3</sup>

At the bottom of the handle is a small ledge cut round it; this may have been intended to accommodate a ring of gold. Just above this comes a circular band with a pattern of overlapping scales.<sup>4</sup> From this bands alternately decorated with rosettes and overlapping scales twine round the handle upwards. These are crowned at the base of the flat plate by two curved belts with a rope-work pattern from which springs out on either side a big palm frond. The flat plate is ribbed on the edge and both its faces are decorated with identical vegetation in low relief. On the curving palm-leaves are seated two women. One is on each side and they confront one another symmetrically in heraldic attitudes. Their heads hang down as though in sleep, but the position of the hands cannot be explained. They wear elaborate flounced skirts which apparently do not come below the knees, and sleeved bodices. They have on their heads fillets or diadems over the forehead. Their hair is rendered as a series of tight curls; there is none of the complicated coiffure of long hanging plaits which is so marked a feature of the women of the Theban<sup>5</sup> and Tiryns friezes.<sup>6</sup> Both figures are distinctly plump.

2. (Nat. Mus. 2900) Portion of an ivory mirror handle, probably belonging to the bronze mirror No. 3 below; much damaged. The handle was not, like No. 1, cut in one piece, but made of two pieces. Of these the handle proper is lost. What is preserved is the flat plate (·05 × ·055 m.) of ivory which surmounted the handle, and had in its upper side a socket cut for the insertion of the bronze mirror. Even this piece is broken, and the front and the back are now separated. The whole was originally at least ·02 m. thick. On the under-side is a curve where the top of the handle fitted, and also a flat rectangular

<sup>1</sup> Tsountas-Manatt, *Mycenaean Age*, p. 187, Fig. 82.

<sup>2</sup> Cf. Evans, *Prehist. Tombs*, p. 44.

<sup>3</sup> Cf. the similar nail-head in gold from the Tomb of Genii, p. 382, below, No. 4537, *c*, and those from L.M. III. tombs near Phaistos, *Mon. Ant.* xiv. p. 602, Figs. 68, 69.

<sup>4</sup> Not visible in the illustration Pl. LIX. A.

<sup>5</sup> 'Αρχ. Δελτίον, iii., p. 339, Fig. 193.

<sup>6</sup> Rodenwaldt, *Tiryns*, ii. Pl. VIII.

socket into which a projection at the top of the handle would have been fastened. As in the case of the complete mirror (No. 1 above), the mirror was set into the handle with nails of wood or perhaps even ivory (there is no trace of bronze), and their heads were studded with small discs of lapis lazuli surrounded with granulated discs of gold (Pl. LIX. B, C).

The sides of the ivory are ribbed and the two faces shew the same scene. On the big fronds of a palm-tree kneel two women in heraldically corresponding attitudes with their faces turned towards one another. They wear wide, deeply flounced skirts which do not come below the knees, bodices with long sleeves, and in their hands hold birds by their feet and tails. These are perhaps doves; their heads and necks are stretched out, and their wings flutter. The hair of the women is bound by a fillet, and seems to be arranged in a series of tight curls or coils. It may be plaited, but it seems short and not long or elaborately dressed.

Carved ivory is rare at Mycenae in the first two phases of the Late Helladic Period. Ivory, it is true, occurs in the Shaft Graves, in tholos tombs of L.H. II. date such as the Tomb of Aegisthus and the Kakovatos tombs, and in L.H. I.-II. chamber tombs like Tombs 529 and 518, but in all these cases the amount of ivory that is carved is extremely small. On the other hand, in L.H. III. tombs like those of Spata<sup>1</sup> and Menidi,<sup>2</sup> carved ivory is very common. Carved ivory also was found in several of the chamber tombs excavated by Tsountas at Mycenae, but pending publication we do not know their date. As regards these mirror handles, the costume with the short skirts and short curly hair is remarkable and rather un-Mycenaean. In style these late ivories resemble those found in the Mycenaean cemetery at Enkomi in Cyprus, where one represents the head of a warrior wearing a leather helmet protected with boar's tusks.<sup>3</sup> This carved ivory head is almost exactly similar to those from Spata<sup>4</sup> and Tomb 27 at Mycenae.<sup>5</sup> It is therefore extremely likely that Cyprus was the source of these carved ivories, and this might account for the peculiarities of costume observed in the women on the two mirror handles. The tight curls of the hair and the features have rather a negroid appearance.

3. (Nat. Mus. 2901) Bronze mirror, circular, with the edge slightly flattened where it was set into the handle. The diameter is .15 m. and the thickness .002 m. Only one of the nail-holes is visible, as the other is obscured by accretions. The bronze itself is in good condition, and was clearly polished. On the surface are traces of adherent wood which suggests that this mirror and its companion, and perhaps other jewels too, were kept in a wooden box. Pl. LIX. D.

4. (Nat. Mus. 2890) Ivory wing, .05 × .04 m. and .005 m. thick.<sup>6</sup> The

<sup>1</sup> B.C.H. 1878, Pls. XIII.-XIX.

<sup>2</sup> Lolling, *Kuppelgrab bei Menidi*, Pls. VI.-VIII.

<sup>3</sup> B.M. *Excavations in Cyprus*, Pls. I., II., especially Pl. II. 1340.

<sup>4</sup> B.C.H. 1878, Pl. XVIII. 2.

<sup>5</sup> Tsountas-Manatt, *Mycenaean Age*, Fig. 85.

<sup>6</sup> In spite of the National Museum inventory this seems to have been found in the tholos and not in the pit in the dromos: *Практика*, 1891, p. 20.

back is scored with very shallow lines indicating that this was probably part of an inlay of ivory.<sup>1</sup> At the root of the wing is an oblong projection (broken) shewing it was part of a figure made up of several sections. On the front the ivory is cut out and inlaid with blue paste. The alternating portions of white ivory and blue paste would represent the shimmering effect of a bird with

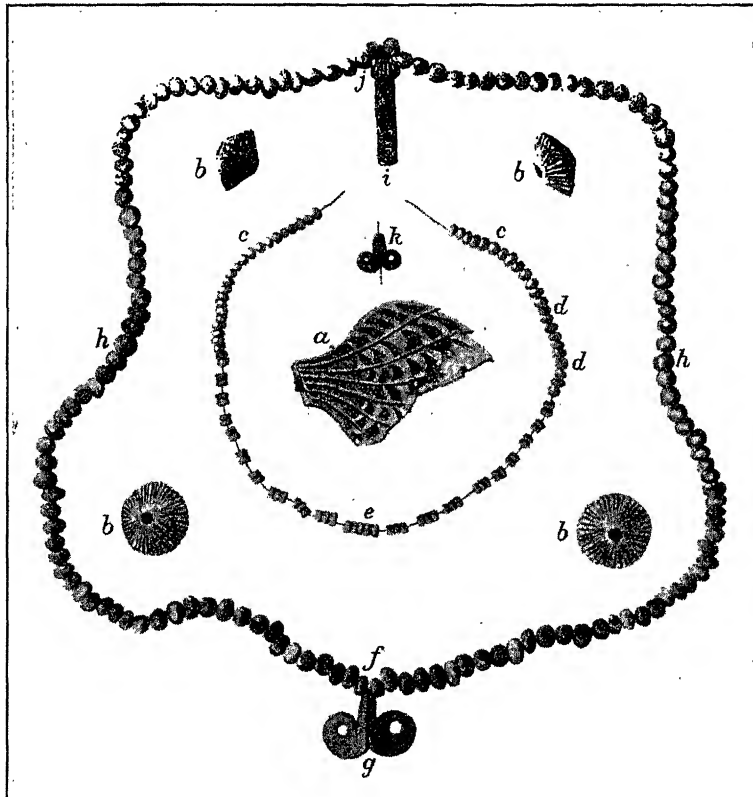


FIG. 81.—TOMB OF CLYTEMNESTRA: BEADS AND OTHER ORNAMENTS FOUND BY TSOUNTAS IN GRAVE-PIT IN DROMOS. (Scale 1 : 2.)

bright plumage. This is an adaptation to ivory of the cloisonné work in gold which the Mycenaean craftsmen practised. Fig. 81, *a*.

5. (Nat. Mus. 2869) Four greenish-blue beads of usual shape, two flattened cones joined together base to base and ribbed on both sides : two are of paste and two of faience ; diam. .018 m. Fig. 81, *b*.

6. (Nat. Mus. 2835) Forty-three small beads of white glass paste ; diam. .004 m. Fig. 81, *c*.

<sup>1</sup> The ivory inlays from Tomb 518 are similarly scored on the back.

One small bead of blue glass paste; diam. .004 m.

Two small beads of greenish glass paste; diam. .004 m. Fig. 81, *d*.

Nineteen segmented beads, eleven with two segments, seven with three and one with five; all are of greenish glass paste; diam. .003 m.<sup>1</sup> Fig. 81, *e*.

Two small rough carnelian beads; diam. .005 m.<sup>2</sup> Fig. 81, *f*.

One lily-bud pendant in lapis lazuli, pierced at base for threading; length .015 m. Fig. 81, *g*.

One lily-bud pendant of dark grey glass paste, pierced for threading; length .01 m. Fig. 81, *h*.

One long tubular glass bead, dark blue; length .022 m. Fig. 81, *i*.

One small flat ribbed bead of dark blue glass paste; diam. .008 m. Fig. 81, *j*.

One hundred and thirty-nine white and grey and dark grey beads of glass paste; diam. .006 m. Fig. 81, *h*.

7. (Nat. Mus. 2795) Twenty-five ornaments of embossed gold leaf pierced along the edges for attachment (probably for sewing on to the grave-clothes). The argonaut is the basic unit of the embossed design. The units are arranged in pairs, the argonauts being set base to base along a central line (Fig. 79, *a*); length .038 m., width .025 m. Necklaces of gold beads with this ornament occur in Crete at the end of L.M. II. and III. at Zafer Papoura and Isopata,<sup>3</sup> in L.M. III. at Phaistos,<sup>4</sup> on the mainland in L.H. II. at Kapakle and Argos,<sup>5</sup> in L.H. III. at Mycenae<sup>6</sup> in tombs with an early fibula. These embossed plaques are inferior in style and workmanship to the necklace beads and so should belong to a somewhat later date.

8. (Nat. Mus. 2798) Ten gold rosettes of various sizes, as Fig. 79, *g*, *h*, *i*. All are pierced round the edges for attachment; diam. .01-.02 m. One small star-shaped bead (hollow and composed of two pieces of gold soldered together along the edge), pierced for threading on a necklace; cf. Fig. 79, *p*; diam. .009 m.

One fragment of a lily-shaped bead of gold like Fig. 79, *n*.

One fragment of embossed gold leaf pierced along the edge for attachment. The design consists of three pairs of horns of consecration set on a low base of masonry. This recalls the model shrines in embossed gold leaf from the Shaft Graves at Mycenae<sup>7</sup> and from the Tholos Tomb at Kapakle,<sup>8</sup> which are surmounted by altars with horns of consecration; length .03 m. Fig. 79, *b*.

<sup>1</sup> Similar to the L.M. III. segmented beads of paste from Isopata (Evans, *Tomb of Double Axes*, p. 16) and the cemetery near Phaistos (*Mon. Ant.* xiv. pp. 632-3, Fig. 102), which replace the earlier faience beads of the same type (Evans, *Palace of Minos*, i. p. 491).

<sup>2</sup> Similar to those from the Treasury of Atreus, see above, p. 355.

<sup>3</sup> Evans, *Prehist. Tombs*, pp. 26, 58, 131; *Tomb of Double Axes*, p. 45.

<sup>4</sup> Savignoni, *Mon. Ant.* xiv. Pl. XXXIX., p. 595.

<sup>5</sup> Vollgraff, *B.C.H.* 1904, p. 383, Fig. 15; 'Eφ. 'Aρχ. 1906, Pl. XIV.

<sup>6</sup> Tsountas, 'Eφ. 'Aρχ. 1888, pp. 138 ff., Pl. IX.

<sup>7</sup> Schliemann, *Mycenae*, p. 267, Fig. 423.

<sup>8</sup> 'Eφ. 'Aρχ. 1906, Pl. XIV.

9. (Nat. Mus. 2797) Nineteen pieces of embossed strips of thin gold; a complete specimen is shewn in Fig. 79, *d*. All are pierced along the edges for sewing on to the grave-clothes. The pattern on them consists of a series of pendant volutes, one set below another, with lotus flowers in the spandrels; length .03 m., width .017 m.

10. (Nat. Mus. 2841) One disc of gold leaf with a design of a triple spiral, Fig. 79, *e*; diam. .026 m.

Two discs of gold leaf with a triple spiral pattern, Fig. 79, *f*; diam. .016 m.

Both this and the preceding one have their edges slightly turned over, and were for covering objects of bone or paste.

Twelve rosettes of various sizes, all pierced round the edges for sewing on to the grave-clothes, Fig. 79, *g, h, i*; diam. .01–.02 m.

Three argonauts (?) in embossed gold leaf, pierced along the edge for sewing on the grave-clothes, Fig. 79, *o*; length .035 m.

A butterfly in embossed gold leaf, much damaged, with a small rosette at its centre, Fig. 79, *l*; length .025 m.

One fragment of an embossed gold strip, like Fig. 79, *j*.

One star-shaped hollow bead of gold, composed of two pieces of metal soldered together along the edges, doubly pierced for threading on a necklace, Fig. 79, *p*; diam. .009 m.

One small piece of gold leaf with an embossed pattern resembling ashlar masonry; this may have been part of the same design as the horns of consecration, see No. 8, above.

A quantity of thin, undecorated gold leaf, much crumpled.

11. (Nat. Mus. 2796) Eighteen pieces of embossed gold strips (Fig. 79, *j*), all pierced for attachment to the grave-clothes. The pattern imitates in leaf gold a necklace of large pendant volutes (or buds) threaded alternately with small ones. The larger have an arc between the volutes and the smaller an iris-bud. This pattern may well have been round the neck of the grave-clothes; length .04 m., width .019 m.

12. (Nat. Mus. 2849) Ornament of thin embossed gold (Fig. 79, *k*), representing a butterfly,<sup>1</sup> pierced round the edges for attachment to the grave-clothes; length .023 m.

13. (Nat. Mus. 2801) Seven lily-shaped hollow beads of gold, pierced for threading in a necklace. Both sides are alike, and the beads are composed of two pieces of gold soldered together at the edge. Work rather rough;<sup>2</sup> length .01 m. Fig. 79, *n*.

Seven heart-shaped beads doubly pierced for threading in a necklace. The front only is ornamented, the back is plain, the beads are hollow, and made of two pieces of gold soldered together at the edges; length .01 m. Fig. 79, *m*.

<sup>1</sup> Similar butterflies from Kapakle, Athens, Nat. Mus. 5610, 5617; 'Εφ. 'Αρχ. 1906, Pl. XIV. Cf. also those from Tomb 102 at Mycenae, J.H.S. 1904, p. 324, Fig. 1, *c*.

<sup>2</sup> Cf. *Mon. Ant.* xiv. p. 599, Fig. 62.



D. By *British School*.

In addition to the above we found the following in the dromos while examining the tomb in 1922 :—

14. One embossed disc of gold with a triple spiral design; the edges are bent over, so that it was the covering of a button or some similar ornament of bone or paste; found in the grave-pit in the dromos, Fig. 79, *q*; diam. .018 m.

15. A pear-shaped embossed ornament of gold, with the edges turned over so as to make it the covering for an object of bone or paste. The pattern is unusual and may be a conventional octopus or else a doubled version of the pattern of one of the gold ornaments from the Treasury of Atreus (Fig. 79, *c*; cf. Fig. 74, *a*); length .034 m. This was found above the drain just outside the dromos to the south.

16. A quantity of gold leaf much crumpled, found in the holes in the threshold; undecorated.

In examining the drain we also found a quantity of miscellaneous pottery which comprised five L.H. II. sherds, including one Ephyraean piece, and ninety-six L.H. III. sherds.

## DATE.

The almost entire absence of any pieces of Palace Style amphorae in this tomb, in contrast to finds from the Lion and Kato Phournos tombs, seems to indicate that it should be assigned to a period when the Palace Style had ceased to flourish, in other words, to the beginning of L.H. III. This view is strengthened by the finds from the grave-pit in the dromos, which are clearly of late date,<sup>1</sup> and by the fact that in 1921 in making tests below the tholos walls we found one obvious L.H. III. piece from an unpainted shallow bowl<sup>2</sup> and several indeterminate L.H. fragments. Further, the close resemblance between the spiral frieze of the façade and the similar frieze from the L.H. III. megaron at Tiryns,<sup>3</sup> which is also distinguished by sawn work in conglomerate, does not allow us to date this tomb any earlier than the beginning of the Third Late Helladic Period, or the first half of the fourteenth century B.C. As this is the approximate dating already attained on quite independent evidence for the Treasury of Atreus, which we believe for the architectural reasons given above to be older than the Tomb of Clytemnestra, the cumulative effect of the

<sup>1</sup> The likeness between them and the finds from the L.M. III. Tombs at Phaistos is to be noted, *Mon. Ant.* xiv. pp. 599 ff.

<sup>2</sup> Found in the bedding of the lowest course between it and the native rock about .50 m. in from the face of the wall.

<sup>3</sup> Cf. Schliemann, *Mycenae*, p. 98, Fig. 153; *Tiryns*, Pl. IV.

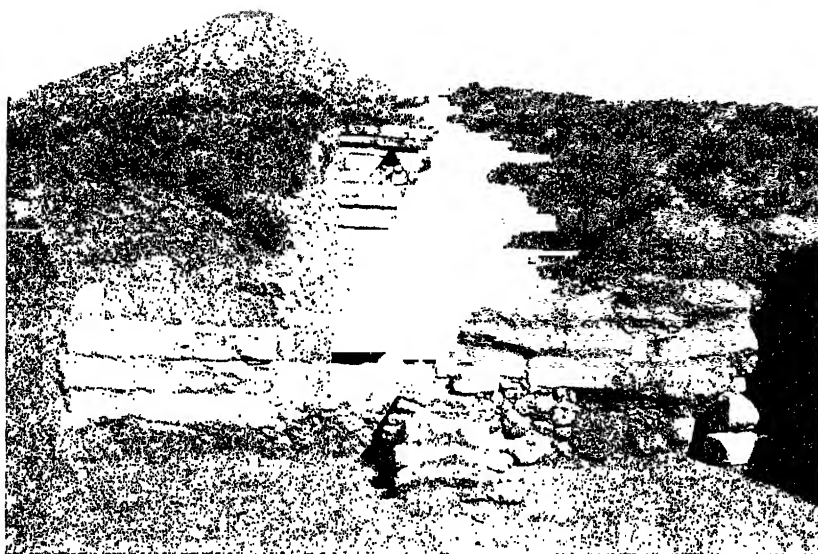
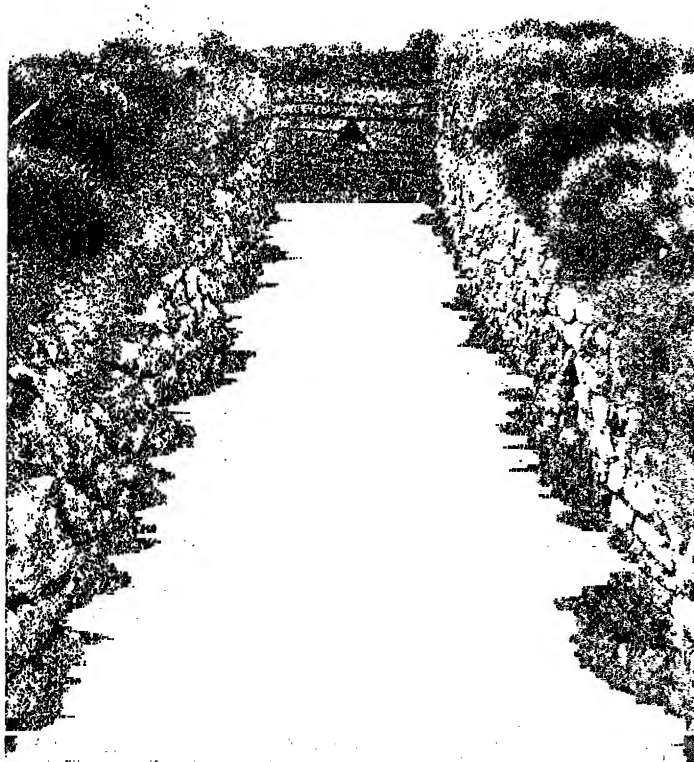


FIG. 82.—TOMB OF GENII: DROMOS AND FAÇADE.

FIG. 83.—THE SAME: WITH WALL CLOSING ENTRANCE TO DROMOS.

evidence for determining the chronology of the tholos tombs of Mycenae by their constructional features begins to be very strong.

### C. THE TOMB OF GENII (Pl. LX.).

This tomb, which is otherwise known as the Perfect Tholos Tomb, because it is in far better condition than the majority, was found and excavated by Tsountas in 1896. Unfortunately, apart from a brief report in the *Πρακτικά*,<sup>1</sup> he has published no further account of it, although Sir Arthur Evans figured one or two of the more interesting finds in his *Mycenaean Tree and Pillar Cult*.<sup>2</sup> In 1921 we made some tests under the walls of the tholos and dromos in the hope of finding potsherds to assist in dating the tomb, but found nothing of importance except a little gold leaf under the north wall. In 1922 we examined and planned the tomb, and cleared the outer or western face of the wall that blocks the entrance to the dromos.

#### *The Dromos* (Figs. 82, 83).

The dromos is about 16.60 m. long and 2.60 m. wide. At its entrance or western end it is blocked by a low wall of ashlar work in poros resting on a rubble foundation. Extensions of this blocking wall ran on either side north and south beyond the extreme ends of the dromos walls. That on the south has been pulled away and very roughly replaced, probably by tomb robbers in ancient times. On the north side three courses of ashlar work in poros are still *in situ* on a foundation course of conglomerate. These side extensions do not bond with the wall that actually blocks the dromos. Probably the latter was not bonded in so that it could be easily removed and replaced when any later interment was made in the tomb. This arrangement is almost exactly parallel to that already observed in the Tomb of Clytemnestra. The sides of the dromos are lined with well-built rubble walls which are practically vertical. They were once packed with tough yellow clay and are still crowned, like the walls of the Panagia Tomb, with carefully adjusted slabs of limestone. The style of building is, however, different from the rubble masonry of the early tholoi and suggests that of the acropolis wall, which dates from the beginning of L.H. III., although the stones are, of course, smaller. There is a foundation course of ashlar work in conglomerate on each side, and

<sup>1</sup> 1896, pp. 29-31.

<sup>2</sup> Figs. 12-14, p. 19.

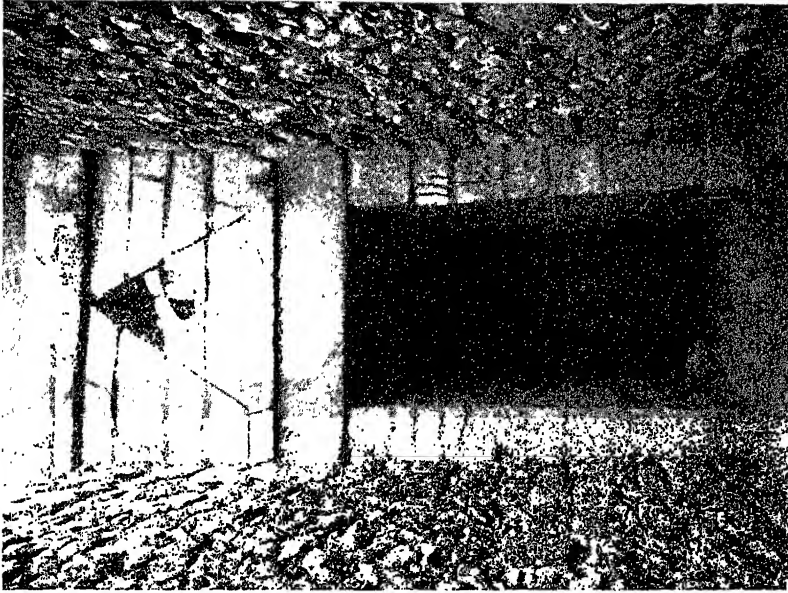


FIG. 85.—TOMB OF GENII: FAÇADE.

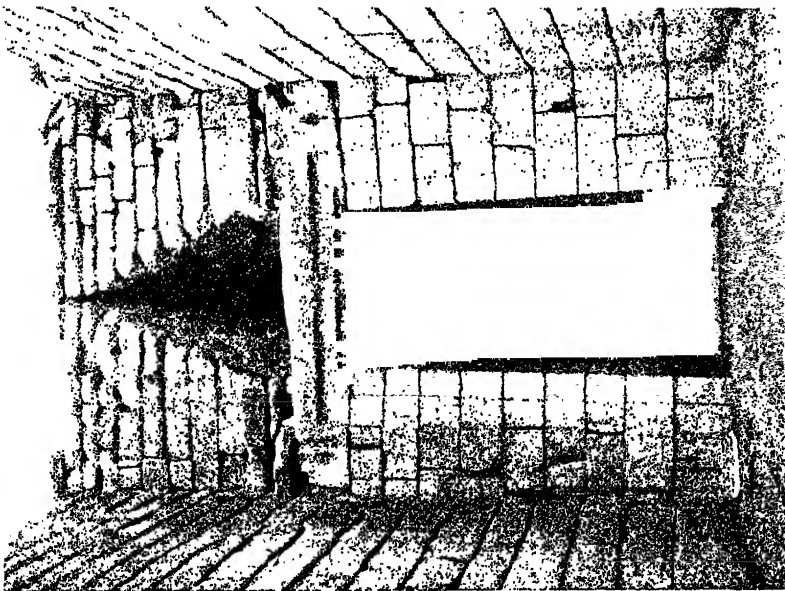


FIG. 84.—TREASURY OF ATREUS: FAÇADE.

here and there among the rubble-work on either side of the façade of the tomb a few pieces of conglomerate have been introduced. These were probably surplus material from the building of the tholos.

*The Façade* (Fig. 85).

The façade is very simple, consisting of ashlar work of well-dressed, mainly sawn, blocks of conglomerate. The lintel projects slightly from the jambs below, and there is a relieving triangle over it, which both on the inside and out is masked by well-fitted, small blocks of poros. On the outside above and below the relieving triangle there are plain horizontal cornices projecting about .10 m. from the façade and .20 m. high. The doorway is about 2 m. wide by 3.40 m. deep and about 3.40 m. high. The side walls incline inwards towards the top. It is built of good ashlar work of sawn conglomerate, the joints of which are pointed with stucco. It is roofed with two large lintel slabs, of which the inner one is very big; they well overlap the side walls, thus providing ample room for the relieving triangle. In the under-side of the inner lintel-block at about the middle point of the doorway, pivot-holes are bored for the insertion of a double door. Below the pivot-holes in the floor is a threshold bedded in a shallow trench cut out in the rock. The threshold consisted originally of at least three blocks of sawn conglomerate, but only the two side blocks are still *in situ*. These are both wedge-shaped and prove that the threshold was fitted in on the same principle as those of the Treasury of Atreus and the Tomb of Clytemnestra. As no pivot-holes can be discerned in the threshold blocks, they were probably covered with bronze or wood sheathed with bronze as in the other two tombs just mentioned. The doorway, like the tholos itself, was floored with cement laid over the natural rock.

*The Tholos* (Pl. LX.).

The tholos is built of ashlar work in conglomerate, and is in almost perfect condition. It is about 8.40 m. in diam., and about 8 m. high. The conglomerate blocks are mainly hammer-dressed, but some are sawn. The vault seems to have been constructed on exactly the same system as those of the Treasury of Atreus and the Tomb of Clytemnestra. In the floor are three grave-pits. The largest, which lies in the southern sector, is over 4 m. long by 1 m. wide and about 1.60 m. deep. It is roofed with

large rough blocks of limestone, and though these were all found in place, yet the pit was empty. The other two grave-pits in the northern sector both measure about 2 m. in length by 1 m. wide, and are approximately 1.60 m. deep. These were roofed with three large slabs of limestone and conglomerate, and were also found empty by Tsountas.

This tomb in construction resembles the Treasury of Atreus, and the Tomb of Clytemnestra very closely, though it has more sawn blocks than the former. It is much smaller than either of them and appears to be a less elaborate version of them. It may be noted that there is no frieze of large blocks in the interior continuing the line of the lintel. The same technical skill which erected those two great monuments is in evidence, as witness the great size of the inner lintel-block, and the careful construction of the vault, but the builder of this tomb must have been less rich and less powerful—granted this is a royal tomb—either a king who was decadent or, if a contemporary of the builder of the Tomb of Clytemnestra, a less highly placed person. A sign perhaps of declining power may be discerned in the large number of grave-pits which indicate its frequent use. They suggest that this king's successors were not able to build tholos tombs for themselves. For these structural reasons, and to judge by the objects found lying on the floor of the tholos by Tsountas, we may date it as the last of the series and not earlier than the late fourteenth century B.C. Other tholos tombs may yet be found at Mycenae to shew both the transition between the Tomb of Clytemnestra and this tomb more clearly and the later development of the tholos type itself.

#### *Finds.*

##### *A. By Tsountas.*

Scattered on the floor of the tomb Tsountas found the following objects, which are now all in the National Museum at Athens:—

4535. Flat plaques of bluish glass paste pierced at all four angles for attachment; one complete specimen like Fig. 86, *a* (.045 by .03 m.), two complete examples of Fig. 86, *b* (.045 by .03 m.), and five fragments.

In plaque *a* we see two pairs of Genii pouring libations from beaked ewers over a square pillar. In the plaques of type *b* we see two pairs of Genii pouring libations from beaked ewers over a column adorned with a long sacral fillet hanging down on either side. It is possible, as suggested by Sir Arthur Evans,<sup>1</sup> that the apparent column is a libation bowl set on a tripod stand, or rather a

<sup>1</sup> *Mycenaean Tree and Pillar Cult*, p. 19.

libation basin erected on a column with additional supports on either side like the Dictæan libation table.<sup>1</sup> It is remarkable that the column should be shewn between the two pairs of Genii, but not between the two right-hand Genii.

Sir Arthur Evans has already pointed out<sup>2</sup> the significance of these plaques in connection with Mycenaean tree and pillar cults. The Genii themselves are, of course, akin to the so-called demons of the Zakro seal impressions,<sup>3</sup> and in their representation may be related to the Egyptian hippopotamus or crocodile divinities.<sup>4</sup> In the latter case the dotted line down the backs of the Genii would suggest the crocodile's spine. There are similar Genii on the gold ring from Tiryns,<sup>5</sup> on another glass plaque from Mycenae,<sup>6</sup> and a gem from Vaphio.<sup>7</sup> All these objects, except the Vaphio gem, can be dated to L.H. III. It is peculiar that, as far as we know at present, representations of Genii do not occur earlier on the mainland, although they are, of course, derived from Crete.

4536. A quantity of small pieces of gold foil, many perforated or with traces of having been attached to bronze.

These are :—

- a. Narrow strips.
- b. Leaves, straight or curved, sometimes with edges doubled over; length .015 m.; hole for attachment. Fig. 88, *w*.
- c. Double leaves.
- d. Part of a star (?).
- e. Piece of a gold rim or binding.
- f. Piece of flattened gold wire.
- g. Piece of gold plate, cut as though something had been stamped from it.
- h. Four plain gold discs, of which three have two perforations at the side; diam. .01 m.; these probably belonged to the curled leaf ornaments, see below, pp. 399 ff. Some are pierced for attachment, some not. Fig. 88, *u*.
- i. Seven small rosettes with eight petals; diam. .013 m.; one of them is of two pieces of gold one below the other. Fig. 88, *r, s, v*.
- j. One square disc with a Maltese cross design. Fig. 88 *t*.
- k. Fragment of a bronze stud or rivet with traces of gold foil adhering to it.

4537. A number of ornaments of gold, etc.

a. A bead of buff paste, shaped like a grain of wheat, and four-sided and grooved (similar to the first class of beads in 4539). It is wrapped in a piece of gold foil, which is slightly broken on one side; length .017, width .007 m. Fig. 88, *o*.

b. Two beads, probably of glass paste, covered with gold foil. They are round like 4541 c, and ornamented with six notches on the circumference; width .007 m. Fig. 88, *p*.

<sup>1</sup> Evans, *op. cit.* p. 16, Fig. 7.

<sup>2</sup> *Op. cit.*, *loc. cit.*

<sup>3</sup> J.H.S., 1902, Pls. VI., VII.

<sup>4</sup> Cf. Glotz, *Civilisation Egéenne*, p. 277.

<sup>5</sup> Αρχ. Δελτίον, ii, Παράρτημα, Pl. I (1).

<sup>6</sup> Athens, Nat. Mus. 4551, Mycenae Tomb 93 : Evans, *op. cit.*, Fig. 12.

<sup>7</sup> Evans, *op. cit.*, Fig. 1.

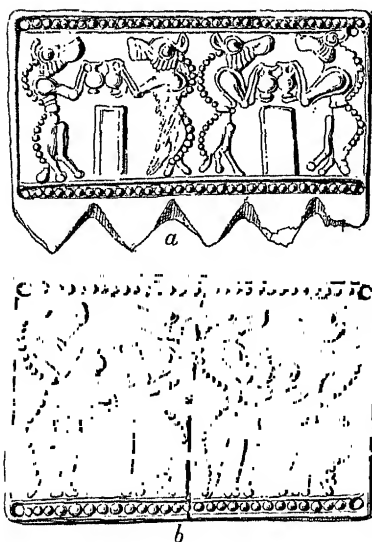


FIG. 86.—PLAQUES OF GLASS PASTE.  
(Scale 1 : 1.)

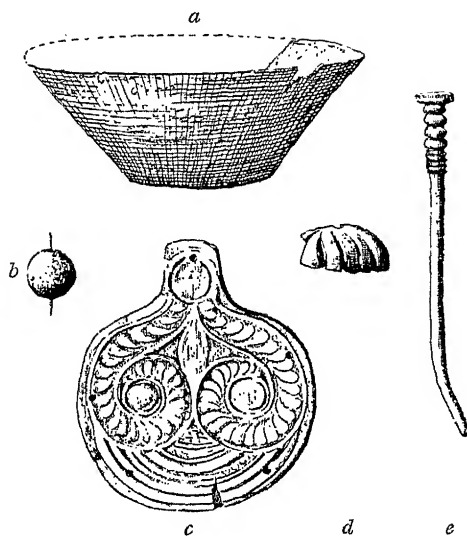


FIG. 87.—OBJECTS OF BRONZE AND TERRA-COTTA. (Scale 1 : 2.)

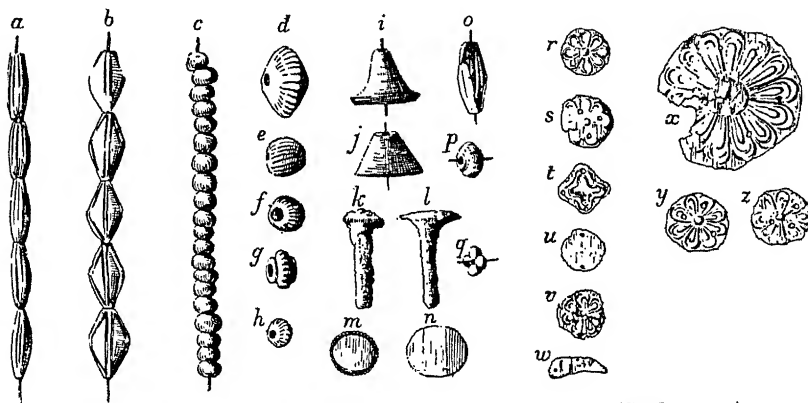


FIG. 88.—GOLD ORNAMENTS, PASTE BEADS, ETC. (Scale 1 : 2.)

FIGS. 86, 87, 88.—TOMB OF GENII: OBJECTS FOUND BY TSOUNTAS.



*c.* Gold nail-head, circular and curved, with a hole in the centre for the pin of the nail, which must have been of bronze, as there are traces of bronze on the gold. Round the edge runs a granulated border, and in the centre, separated from the border by a very narrow band of gold, is a thin slice of lapis lazuli; diam. about  $\cdot 012$  m. This type of nail-head with a granulated border and lapis lazuli inlay occurs in other objects which can be assigned to the same period (early L.H. III.), for instance, the mirror from the grave-pit in the dromos of the Tomb of Clytemnestra (see above, p. 369, Pl. LIX, A), where the handle is attached by two nails similarly decorated, but small, flat and circular as in *c* below.<sup>1</sup> Fig. 88, *m*.

*d.* Similar nail-head, but without the inlay.

*e.* Small gold disc, flat and with a granulated border like *c*, but without the inlay. There is no hole in the centre, but a small one at the side against the border; diameter  $\cdot 007$  m.

*f.* Head of a bronze nail with the stump of the pin. The head is oval and curved and covered with gold foil folded over the edges;  $\cdot 017$  by  $0\cdot 12$  m. Fig. 88, *n*.

*g.* Similar to *f*, but flat and broken.

*h.* Small piece of gold plate.

*i.* Hollow gold bead, divided into four lobes; width  $\cdot 006$  m. Fig. 88, *q*.

4538. One hundred and forty amygdaloid beads, of which one hundred and thirty-eight are of glass paste (probably originally bluish, but now decomposed to buff), with incisions along the edges and down the centre on both sides, and two of greenish faience; length  $\cdot 017$  m. Fig. 88, *b*.

4539. Sixty beads of glass paste, now buff in colour, shaped like a grain of wheat. Of these forty-eight are four-sided and grooved, length  $\cdot 016$  m., width  $\cdot 008$  m., and twelve are rounded and grooved, length  $\cdot 017$  m., width  $\cdot 006$  m. Fig. 88, *a*.

4540. Thirty-six beads of vitreous paste, buff or greenish; the beads are round and melon-shaped with fourteen to twenty-two sections; the average length is  $\cdot 007$  m., and the average width is  $\cdot 01$  m. Of these six are cream-coloured and have a raised rim round the perforation, one is grey with only six sections, and one is large, flat and buff-coloured and measures  $\cdot 009$  by  $\cdot 017$  m. Fig. 88, *d-h*.

4541. A quantity of beads (Fig. 88, *c*) which can be classified thus:—

*a.* Three hundred and thirty-one grey round beads of glass paste; diam.  $\cdot 005$  m.

*b.* Four small grey beads of glass paste with five or six deep notches; diam.  $\cdot 007$  m.

*c.* One dark round bead, glass paste; diam.  $\cdot 008$  m.

*d.* Seventeen small dark round beads of glass paste;  $\cdot 006$  m. in diameter.

<sup>1</sup> Somewhat similar nail-heads were found in the L.M. III. cemetery at Phaistos, *Mon. Ant.* xiv. p. 602, Figs. 68, 69.

- e.* One bead of buff clay; diam.  $\cdot 005$  m.
- f.* Nine grey flat rings, like little washers; diam.  $\cdot 005$ .
- g.* Two white flat rings; diam.  $\cdot 006$  m.
- h.* Two very small cylindrical beads, grey; diam.  $\cdot 001$  m.

4542. Under this number are grouped a quantity of small objects.

*a.* One small rough, unpolished carnelian bead like those from the Treasury of Atreus (Fig. 75, *o*, p. 355); diam.  $\cdot 007$  m.

This is the only object in stone; the following are all in glass paste of varying tints ranging from yellowish-buff to blue.

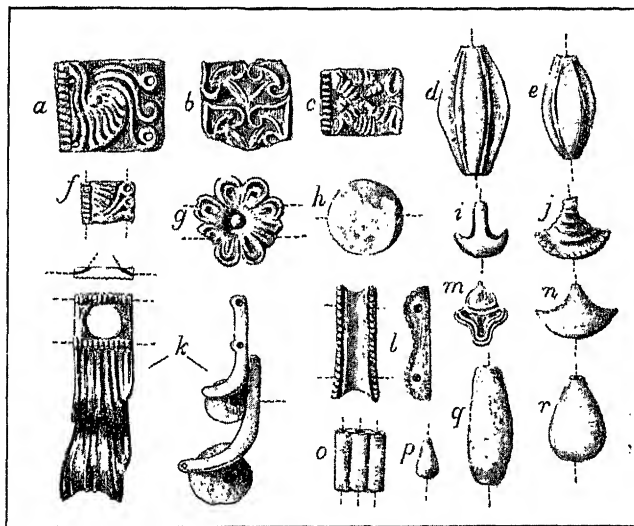


FIG. 89.—TOMB OF GENII: ORNAMENTS OF GLASS PASTE FOUND BY TSOUNTAS.  
(Scale 2 : 3.)

- b.* Three plaques (Fig. 89, *a*) with embossed argonaut designs and a beaded edge, pierced at all four angles for threading;  $\cdot 015$  by  $\cdot 02$  m.
- c.* One similar plaque (Fig. 89, *b*) with an ivy-leaf design, unpierced;  $\cdot 015$  m. square.
- d.* Three more or less complete and three fragmentary plaques, unpierced, with a design of four murex shells;  $\cdot 012$  by  $\cdot 015$  m. (Fig. 89, *c*).
- e.* Two amygdaloid beads, one  $\cdot 025$  m., the other  $\cdot 02$  m. long (Fig. 89, *d*, *e*).
- f.* Six small plaques (pierced for threading) with argonaut designs (Fig. 89, *f*);  $\cdot 01$  m. square.
- g.* Rosette, with two holes for threading (Fig. 89, *g*);  $\cdot 017$  m. in diameter.
- h.* Lentoid bead pierced for threading (Fig. 89, *h*); diam.  $\cdot 018$  m.
- i.* Small triangular or lily-bud ornament, pierced for threading;  $\cdot 01$  m. long (Fig. 89, *i*).

j. Bead shaped like a lily-flower, pierced for threading;  $\cdot 01$  m. long (Fig. 89, j).

k. Three saddle-shaped ornaments (Fig. 89, l), pierced for threading at each end; one end is wider than the other, so that when threaded they would naturally make a curve; length  $\cdot 022$  m.

l. Four small heart- or scale-shaped plaquettes, probably for inlaying;  $\cdot 012$  m. long (Fig. 89, m).

m. One small, plain, triangular or lily-shaped bead (Fig. 89, n),  $\cdot 01$  m. long.

n. Eight whole or fragmentary segmented tubular beads of three sections each (Fig. 89, o);  $\cdot 012$  m. long.

o. Two small bottle-shaped beads pierced vertically (Fig. 89, p);  $\cdot 008$  m. long.

p. Two tubular beads, one of which has a diagonal raised band encircling it three times, pierced vertically (Fig. 89, r); length  $\cdot 015$  m.

q. One large bottle-shaped bead, pierced vertically (Fig. 89, r); length  $\cdot 015$  m.

r. Four specimens of the curled leaf ornament (Fig. 89, k), two with an upper plate, pierced through the under edges (from side to back) for threading, and with a horizontal hole bored through the curl of the leaf; length  $\cdot 024$  m.; two (length  $\cdot 028$  m.) with the upper part plain and tapering, pierced through from front to back with two holes, so that it could be fastened below one of the pieces, with an upper plate (the attachment would be made with thread or thin gold wire passed through the hole in the curl of the leaf), so as to make an ornament consisting of two curled leaves one below the other (Fig. 89, k). The tips of the pointed leaves at the side are pierced for the attachment of two or three small plain gold discs fastened with thin gold wire.<sup>1</sup>

There are also two fragmentary plaques and seven broken pieces of other ornaments, two small flat beads, one whorl of the long-shanked type, and one example in very bad condition of the shanked rosette ornament common in the Menidi<sup>2</sup> and Spata tombs.

#### 4543. Ornaments of terracotta :—

a. Terracotta ornament, flat and roughly circular with a short stem so that it resembles a fan. On the stem is stamped a circle and from it rise two fern-like fronds, curling inwards. Between and below them is a flat oval bud, and above them the ground is incised in concentric curves like the conventional papyrus-flower. The back is plain, but the edge is perforated in five places, twice on each side and once on the stem; width  $\cdot 061$  m., length over all  $\cdot 054$  m., length of stem  $\cdot 012$  m., width of stem at base  $\cdot 02$  m., tapering to  $0\cdot 14$  m. Fig. 87, c.

<sup>1</sup> The development of this curled leaf ornament is discussed in the Appendix below, pp. 397 ff.

<sup>2</sup> Lolling, *Kuppelgrab bei Menidi*, Pl. III. 23.

*b.* Three fragments of exactly similar objects, two of them with traces of cobalt-blue powder applied to the surface. This would indicate that they were coloured to imitate ornaments in lapis lazuli.<sup>1</sup>

An actual ornament of this type in lapis lazuli was found by Tsountas on the Acropolis at Mycenae in 1889.<sup>2</sup> There are many other examples of this ornament also from Mycenae in different materials—gold,<sup>3</sup> ivory,<sup>4</sup> gilt bronze<sup>5</sup> and glass paste.<sup>6</sup> It is illustrated in a late fresco from Tiryns,<sup>7</sup> and occurs as a decorative element on the gold box from the Third Shaft Grave,<sup>8</sup> and on gold strips from Tomb 91.<sup>9</sup> It is thus apparent that it was a favourite motive in all three phases of the Late Helladic Period.

*c.* Fragment of a large melon-shaped bead of terracotta, with square cut notches in which there are traces of cobalt-blue powder as in *b*. This also would have been so coloured in order to imitate a bead in lapis lazuli. When complete the bead would have had about eighteen notches; diam. about .027 m. Fig. 87, *d*.

*d.* Three round terracotta beads; diam. .012 m. Fig. 87, *b*.

4544. Forty-four bronze nails, with green patina, of varying size; the largest is .028 m. long, but the most perfect is .020 m. long; the heads vary in diameter from .012 to .014 m. There are also four pins without heads, length .019 m. Fig. 88, *k, l*.

4545. Fourteen whorls or buttons<sup>10</sup> of steatite (Fig. 88, *i, j*), all pierced from top to bottom and varying in colour from pale green to dark purple. Of these ten (diam. .022 m., height .014 m.) are shaped like an inverted mushroom with a shank gradually widening to the base, which has its surface bevelled towards the centre and edge; two are similarly shanked, but have the bottom of the base flat; and the remaining two (diam. .015 m., height .010 m.) are of the ordinary conoid or pyramidal type. Steatite whorls are a characteristic feature of L.H. III. tombs in the Kalkani cemetery, where in L.H. I. and II. tombs the whorls are of terracotta. In Crete too steatite whorls occur in L.M. III. tombs.<sup>11</sup>

4546. Miscellaneous fragments of bronze, silver and other materials.

*a.* A piece of ivory (.062 by .012 m.), probably part of the handle of some

<sup>1</sup> Cf. the practice of decorating clay vessels with unfixed colours, apparently for funeral purposes only, Evans, *Tomb of Double Axes*, pp. 26 ff.; *Prehist. Tombs*, p. 72.

<sup>2</sup> Athens, Nat. Mus. 2523.

<sup>3</sup> Tomb 88, Athens, Nat. Mus. 3153.

<sup>4</sup> Tomb 88, Athens, Nat. Mus. 3214; Citadel, Athens, Nat. Mus. 3024.

<sup>5</sup> Tomb 55, Athens Nat. Mus. 2794.

<sup>6</sup> Tomb 55, Athens, Nat. Mus. 2793; Tomb. 69, Athens, Nat. Mus. 2929; Mycenae 1892, Athens, Nat. Mus. 2893; Menidi, Athens, Nat. Mus. 1941.

<sup>7</sup> Athens, Nat. Mus. 1596; Schliemann, *Tiryns*, Pl. VI.

<sup>8</sup> Athens, Nat. Mus. 23, 24; Schliemann, *Mycenae*, Figs. 303–306.

<sup>9</sup> Athens, Nat. Mus. 3191.

<sup>10</sup> Tsountas-Manatt, *Mycenae Age*, p. 174.

<sup>11</sup> Evans, *Prehist. Tombs*, p. 89, Fig. 101 (15–17); *Mon. Ant.* xiv. p. 607, Fig. 76.

bronze instrument, for at one end it has been slightly hollowed and bears traces of bronze.

*b.* Part of a small ivory button, circular and grooved round the edge, and a splinter from an ivory plaque.

*c.* Two pieces of lead wire, about .005 m. wide; one is bent into a double hook about 0.45 m. in depth; the other consists of two pieces twisted together, length .048 m.

*d.* Four small pieces of wood.

*e.* Several small fragments of silver plate; the largest is .03 by .02 m.

*f.* Part of a small plain circular cup (Kamarese type) of thin bronze with sloping sides; diameter at base .035 m., at lip .082 m., height .041 m. No handle preserved. Fig. 87, *a*.

*g.* Bronze pin, with a plain head and seven beadings on the stem below it; length .092 m., diameter of the head .009 m.; Mycenaean? Fig. 87, *c*.

*h.* Three fragments of thin plain bronze rings; the largest is .007 m. wide and .03 m. in diameter.

*i.* Crooked bronze handle from a jug; total length .168 m., width .016 m.

*j.* A piece of bronze plate with a raised, round, moulded line and with fragments of gold foil still adhering to it; about .042 by .027 m.

*k.* Various unimportant scraps of bronze plates and pins.

#### *B. By the British School.*

In clearing the western or outer face of the wall that blocks the entrance to the dromos we found on the ground level one large rosette of thin gold foil (.035 m. in diameter, Fig. 88, *x*), with fragments of another and two small rosettes of thin gold foil (.015 m. in diam., Fig. 88, *y*, *z*). All these rosettes are pierced with three or more holes for sewing them on to the grave-clothes (see above, p. 56).

Besides these gold ornaments we found a quantity of pottery in the same place, which may be classed as follows:—

Late Helladic II., four pieces of Palace Style amphorae which, to judge by their poor fabric and style, cannot be earlier than the very end of this period, and may easily be later. One of the more characteristic pieces is shewn in Pl. XLV. *m*. There are also eleven pieces of a very large and clumsy alabastron, which join on to a piece long in the Nauplia Museum and presumably found by Tsountas in excavating the tomb. This alabastron was at least .35 m. in diameter and, though it has the traditional patterns of L.H. II. alabaster, is of poor fabric and is coarse and overgrown. It recalls the large example from Tomb 529, but is very inferior and is probably L.H. III. in date. There was also one other small piece of an alabastron.

Late Helladic III., one hundred and thirty-three sherds, including kylikes, stirrup vases and other characteristic shapes of this period, and two L.H. III. figurines of animals in terracotta.

Geometric, two sherds.

In the earth thrown out by Tsountas we found two pieces of Palace Style amphorae; one is shewn in Pl. XLV. *l*, and is of such poor style and fabric that it cannot be earlier than the beginning of L.H. III. The other resembles one of the vases from the first tholos at Kakovatos (*Ath. Mitt.* 1909, Pl. XVII.), but is much inferior. All the other sherds, fifty-one in all, are L.H. III., and include stirrup vases of the Tell-el-Amarna style and other typical shapes.

#### DATE.

The pottery is so miscellaneous that it is of little value for dating the tomb. There is no evidence that any of it really belonged to the tomb, and the fragments of Palace Style amphorae, which are so very inferior, might easily be intrusive. This evidence should not be allowed to weigh against the strong architectural reasons for dating this tomb to the Third Late Helladic Period. This date too agrees with that furnished by the small objects found by Tsountas in the tholos.<sup>1</sup> Among these the plaques, beads and other ornaments of bluish glass paste, especially those covered with thin gold foil, find their nearest analogies in the objects of similar style and material found in the Menidi<sup>2</sup> and Spata<sup>3</sup> tombs, which are dated without any doubt to L.H. III.<sup>4</sup> Steatite whorls are also typical of the L.H. III. chamber tombs at Mycenae. This comparison is supported by the ornaments in terracotta covered with blue paint to imitate lapis lazuli, which again are unmistakably of L.H. III. date. There seems thus to be no valid reason why we should not date this tomb to the Third Late Helladic Period.

#### 5. SUMMARY AND CHRONOLOGY.

As a result of our survey of the nine tholoi of Mycenae and of the kindred tomb at the Argive Heraion we can now summarise the characteristics of the three groups into which we have divided them, at the same time indicating the differences between them and studying the development of the type.

<sup>1</sup> They are similar to the small objects from the L.M. III. tombs at Phaistos, *Mon. Ant.* xiv. pp. 599 ff.

<sup>2</sup> Lolling, *Kuppelgrab bei Menidi*; cf. Wolters, *Jahrbuch*, 1899, pp. 115 ff.

<sup>3</sup> *Ἀθήναιον*, vi. Pl. VI.; Furtwängler-Loeschcke, *Myk. Vasen*, pp. 35 ff.; Haus-soullier, *B.C.H.* 1878, pp. 185 ff., Pls. XIII.-XIX.

<sup>4</sup> Ornaments in bluish glass paste in L.H. III. replace the faience of L.H. I.; consequently faience is commoner in Crete because Knossos was dominant in the earlier period, and glass paste is commoner on the mainland because by L.H. III. the supremacy of Mycenae was established.

## THE FIRST GROUP.

In the first group all the tombs are built of rubble masonry of limestone, and no particular care is visible in the construction of the doorways, although the jambs are made of large blocks. The lintels are short and had no relieving triangles above them. This is clearly proved by the Tomb of Aegisthus. In the two earliest tombs of this group, the Cyclopean Tomb and the Epano Phournos, the sides of the dromos are not lined with rubble walls. The Tomb of Aegisthus, which is more developed than the other two, has rubble walls to line the dromos, and it has also a second or later façade built in front of the original one. It is constructed of ashlar work in poros on a foundation of conglomerate. Ashlar work of this type is characteristic of the second group of tombs, which are classed together because of the similarity of their construction. That the first façade of the Tomb of Aegisthus should be of rubble work, and the second, of ashlar masonry of poros, proves that the ashlar work is later than the rubble work, and consequently that the second group of tombs is later than the first. This leads to another conclusion, that the discovery of the principle of the relieving triangle was not made till the Mycenaeans had been building tholoi for some time.

## THE SECOND GROUP.

In the second group the dromoi are lined with masonry, in two cases (the Panagia and Heraion tombs) partly with rubble and partly with ashlar work in poros, while in the other two cases the dromoi are lined throughout with good ashlar work in poros. The doorways are built of large blocks of dressed conglomerate, but there is no trace of the use of the saw. The lintel-blocks are long and, as is shewn clearly by the Panagia Tomb, had relieving triangles above them. In three cases, owing to the builders not yet being skilled enough to dress the heavy and hard conglomerate with fineness and accuracy, the façades are built of ashlar work in poros set in front of the rough-hewn conglomerate. We have seen in the case of the Lion Tomb that this poros work is clearly contemporary with the rest of the tomb, since it supported one of the lintel slabs. The use of large conglomerate blocks for the doorways, and the laying of a base course of the same material for the walls of the tholos, shews that the Mycenaean architects had grasped the fact that the doorway was the weakest part of the building, and that the tholos walls must be well

bedded. We have only to contrast the condition of the doorways of the three tombs of the first group with those of the four tombs of the second to see that a doorway constructed of rubble work even of large stones is very unstable, and is apt to collapse under the lateral pressure of the superstructure. On the other hand, the massive conglomerate doorways of the tombs of the second group still stand unshaken after all the vicissitudes of over three thousand years.

#### THE THIRD GROUP.

In the third group the dromoi are lined with ashlar work in conglomerate except in the case of the Tomb of Genii, where the ashlar work in conglomerate was reduced to a minimum on account of expense. The doorways are also constructed of ashlar work in conglomerate, and the use of the saw first observed in the Treasury of Atreus is extremely common in the other two tombs. The tholoi are built of excellent ashlar work in conglomerate of a most solid and imposing character. The engineers of this period, after long experience, had learnt not only how to dress hard stone, but also how to handle enormous blocks of the same heavy material. The inner lintel-block of the Treasury of Atreus is gigantic, and weighs over one hundred tons, but other blocks, such as the inner lintel of the Tomb of Genii and those of the frieze round the tholos of the Tomb of Clytemnestra, are not to be despised in point of size or weight. Great qualities were required to build these noble monuments. Elaborate calculations were necessary to plan them, vivid imagination to design them, and great practical skill to erect them so well and truly. The Mycenaean engineers in intelligence and craftsmanship were Cyclopes indeed.

The side chamber of the Treasury of Atreus and the elaborate decoration of the façade of that tomb and of the Tomb of Clytemnestra are exceptional features that need not be considered here. The insertion of thresholds, of door-frames and of doors in the Lion Tomb and the three tombs of the last group is, however, a noteworthy feature, and marks an advance on the earlier tombs, which were closed by walls built across the doorway, like the chamber tombs, of which, after all, the tholos tombs are only a royal or elaborate version. The tholos tombs bear the same relation to the private chamber tombs that the royal shaft graves bear to the simple Middle Helladic graves.<sup>1</sup> The Lion Tomb is the first

<sup>1</sup> See p. 120, above.



to have a door, but there it is most inconveniently placed flush with the façade of the tomb. This would mean that it was exposed to weather and other circumstances which would cause it to perish. The architects seem to have observed this, for the doors of the other three tombs are set in the middle of the doorways, and are well sheltered. The thresholds of the three tombs, where such are still preserved, are all constructed on the same principle, the most natural one to use, the blocks, as we have seen, being wedged in between the side walls.<sup>1</sup> The joints would not shew, as the slabs were afterwards covered with bronze or wood cased with bronze.

This division of the tholos tombs into three groups gives us a perfectly logical and consistent development. The tomb of Aegisthus shews the transition from the first to the second groups, and the Lion Tomb with its early form of door provides the connection between the second and third groups. The second group is characterised by the discovery of the relieving triangle and by ashlar work in poros. The third group is distinguished by the discovery of the possibility of sawing hard stone like conglomerate and by great advances in engineering skill, which facilitated the handling of gigantic blocks.

#### CHRONOLOGY.

In the palace at Tiryns, which dates from the Third Late Helladic Period, sawn conglomerate thresholds and anta blocks are a conspicuous feature, since no conglomerate is to be found near that site. The great gate at Tiryns is also constructed of sawn conglomerate, and Professor Kurt Mueller has recently demonstrated that this belongs to the same period as the Palace. At Mycenae the Lion Gate is built of similar material, and the palace on the summit of the citadel has most of its thresholds made in the same way. These two buildings, as we have already seen,<sup>2</sup> belong to the Third Late Helladic Period. Even if there was no evidence from Mycenae itself to assign them to that period (and we have seen above that there is enough and to spare), so strong are the architectural analogies between them and the corresponding gate and palace at Tiryns that it would be impossible to keep them apart. The striking structural similarity between the tholoi of the third group and the buildings at Tiryns and Mycenae just mentioned indicates that these three tombs should be assigned to the same date.

<sup>1</sup> See pp. 347 ff., 360 ff., 378, above.

<sup>2</sup> See above, pp. 12 ff., 268 ff.

As owing to the rare use of the saw the Treasury of Atreus appears to be the earliest of the three, we can assign it to the very beginning of the Third Late Helladic Period, about 1400 B.C. This date agrees well with the evidence of the pottery found by us in our investigations of the threshold and in the dromos, and also with the finds made by Stamatakes.

The Tomb of Clytemnestra would come next in date, and this is confirmed by the objects found by Tsountas in the grave-pit, and by the pottery and other things found by Mrs. Schliemann and those found by us under the tholos walls.

Last would come the Tomb of Genii, which is already well dated to the Third Late Helladic period by the objects of that date found by Tsountas within it. It will thus be seen that the finest tombs of Mycenae are of the same date as the strongest fortifications and best buildings both there and at Tiryns. These were built in the fourteenth century B.C., that is to say, after the fall of Knossos, and it is perfectly natural that Mycenae should have reached its zenith after the star of Crete had set.

Having thus acquired a fixed point for the third group, it is easy to give approximate dates for the other two. The Shaft Graves within the Grave Circle are the tombs of a dynasty which ruled Mycenae from the end of the seventeenth till late in the sixteenth century B.C., and we have accordingly called these princes the Shaft Grave Dynasty. The tholos tombs are almost certainly the tombs of kings. If they are the tombs of kings, they cannot well be contemporary with the Shaft Graves, as it would be absurd to imagine two dynasties ruling simultaneously at Mycenae. The princes buried in the tholos tombs, whom we may thus call the Tholos Tomb Dynasty, must therefore have been either earlier or later than the Shaft Grave Dynasty. The tholos tombs are not Middle Helladic and so cannot be earlier, but must be later. The Shaft Graves are Late Helladic I., and the third group of tholos tombs is Late Helladic III. Thus the first and second groups should fall between the Shaft Graves and the beginning of the fourteenth century B.C., for we assume that the change of royal burial customs coincides with a change of dynasty. Consequently, the earliest tholos tombs should follow the last Shaft Graves.

We can therefore assign the first two tombs of the first group of tholoi to the end of L.H. I. The remaining tomb of the first group, the Tomb of Aegisthus, which belongs to the transition from L.H. I. to L.H. II., and the three tombs of the second group, with the Heraion Tomb, would cover

Late Helladic II., or roughly speaking the fifteenth century B.C. This dating is confirmed by the evidences of date provided by the pottery and other objects found in the tholoi in question, though the ceramic evidence is in most cases from the circumstances not over satisfactory.

One point may be mentioned in connection with the ashlar work which is so marked a feature of the two later groups. In Crete the great period of ashlar masonry at Knossos, Phaistos, Tylissos and other sites is the First Late Minoan Period. It might therefore be supposed by those unfamiliar with the sites of the mainland that the ashlar work of Mycenae should be assigned to a corresponding date. It is true, of course, that Mycenae borrowed the Cretan civilisation which towards the end of the seventeenth century invaded the mainland in force. It is a truism, however, that all imitations must be later in date than their originals. This has been well illustrated by the Cycladic imitations of Cretan pottery in Melos.<sup>1</sup> Therefore we should not expect ashlar work on the mainland to be as early as in Crete. Good ashlar work was being built in Crete in L.M. II., as shewn by the Royal Villa <sup>2</sup> and Little Palace <sup>3</sup> at Knossos, and even in L.M. III. at Praesos.<sup>4</sup> Consequently no surprise need be felt if the earliest ashlar work at Mycenae, that of the second façade of the tomb of Aegisthus, cannot be dated earlier than the first half of L.H. II., or the fifteenth century B.C. Knossos had close at hand in its gypsum quarries good easily cut material suitable for ashlar work. Mycenae had no such stone ready to hand. The local conglomerate and limestone were both too hard to be conveniently dressed at that early stage. The poros, which is used for the earlier ashlar work, comes from quarries lying in the hills north-west of Mycenae towards Nemea. Later as technical skill progressed the Mycenaean learnt to saw and dress the hard conglomerate for ashlar masonry. Mycenae and Knossos are not so very close together, and the former had adopted almost in its entirety the culture of the latter. But even so we should not expect complete correspondence between them, even to the extent of suggesting that ashlar work at both sites should be contemporary. To do so is to overlook important elemental facts. Not all the ashlar masonry at Knossos even is of one and the same period. There is a fundamental

<sup>1</sup> *B.S.A.* xvii. p. 14.

<sup>2</sup> *Ibid.* ix. pp. 130 ff.

<sup>3</sup> *Ibid.* xi. pp. 2 ff.; Evans, *Tomb of Double Axes*, pp. 59 ff.

<sup>4</sup> *B.S.A.* viii. pp. 245 ff.

difference in space and time between Knossos and Mycenae, and one should not be judged too strictly by the code of the other.

#### ORIGIN AND DEVELOPMENT.

Although it will thus be seen that the tholos tomb progressed from the primitive tholos of the Cyclopean Tomb type to magnificent erections like the Treasury of Atreus, yet this development is confined to a comparatively short period, from the end of L.H. I. to the middle of L.H. III. It is, of course, possible that other tholoi later in date than the Tomb of Genii may yet be found at Mycenae, and the tholos tombs of Marmariene<sup>1</sup> and Sesklo<sup>2</sup> in Thessaly, which yielded Geometric pottery of a very early style, shew that the principle of the tholos survived to the beginning of the Iron Age. On the other hand, in the tombs of the Middle Helladic Period or even in the Shaft Graves of Mycenae, there is no hint to explain the introduction of the tholos. It comes quite suddenly, and certainly has, so far as we know now, no previous history at Mycenae. Most of the tombs of the Early Cycladic cemeteries at Chalandriane and Hagios Loukas in Syra were not cist graves, but built chamber tombs.<sup>3</sup> They are not large and vary much in shape, some being rectangular, some trapezoidal, some round and some oval. They all have a door and a roof of overlapping slabs, while the walls of the chamber incline inwards towards the top. These may be considered as the Early Cycladic parallels to the Early Minoan tholoi of the Messara in Crete. We have no possible means of knowing whether there is any connection between these primitive Cycladic tombs and the developed tholoi of the last two phases of the Late Helladic Period. In any case, even if we hold that these Cycladic tombs are a kind of rudimentary tholos, there is too long an interval—some three hundred years at least—between them and the earliest tholoi of Mycenae to justify any suggestion that the Late Helladic tholos developed directly from such prototypes.

In the short time and space allowed us it has been impossible to extend this enquiry over the other tholos tombs of the mainland. But brief reflection will shew that none of them can be dated appreciably earlier than the Tomb of Aegisthus. So strong is the evidence of the architecture,

<sup>1</sup> *Πρακτικά*, 1899, p. 101; Tsountas, *Προιστορικά Ἀκροπόλεις Διμηνίου καὶ Σέσκλου*, p. 121.

<sup>2</sup> Tsountas, *op. cit.* p. 115.

<sup>3</sup> Tsountas, *Ἐφ. Ἀρχ.* 1899, pp. 79 ff., Pl. VII.

of the pottery and of the other finds from the tombs of Vaphio,<sup>1</sup> Messenian Pylos,<sup>2</sup> Kakovatos,<sup>3</sup> Thorikos<sup>4</sup> and Kapakle,<sup>5</sup> that the subtlest arguments cannot set their date back even as far as the middle of the Shaft Grave Dynasty. Other tholos tombs, such as those of Orchomenos,<sup>6</sup> Tiryns,<sup>7</sup> Dimeni<sup>8</sup> and Menidi,<sup>9</sup> are clearly dated by their architecture or their contents to the Third Late Helladic Period. The rest of the mainland confirms the evidence of Mycenae that no tholos tomb yet excavated is older than the end of the sixteenth century B.C. It is equally self-evident that the tholos cannot possibly have been evolved from the cist and shaft graves of Middle Helladic times or of Late Helladic I.

Since Mycenae adopted almost wholesale the culture of Crete, we naturally turn to Knossos and the other hundred cities of that island. In Crete large tholoi of rubble masonry existed in Early Minoan times in the Messara, where they have been found at Platanos,<sup>10</sup> Hagia Triada,<sup>11</sup> Koumasa<sup>12</sup> and other places. None of these tholoi stand to any great height; all that are left are great rings of rubble masonry. There is thus no absolute proof that these tombs of the Messara were really tholoi, although Dr. Xanthoudides,<sup>13</sup> who has excavated many of them, believes, from the enormous quantities of fallen stones found within them, that they were once funereal vaults like the later tholoi of the mainland. These Cretan tholoi do not come down later in date than the first phase of the Middle Minoan Period, that is to say, they were disused by the beginning of the Second Millennium B.C. In Middle Minoan times no tholoi are known in Crete and the ordinary Late Minoan tombs so far known, to

<sup>1</sup> 'Εφ. 'Αρχ. 1889, pp. 129 ff.

<sup>2</sup> *Ibid.* 1914, pp. 99 ff.

<sup>3</sup> *Ath. Mitt.* 1908, pp. 295 ff.; 1909, pp. 269 ff.

<sup>4</sup> *Πρακτικά*, 1893, pp. 12 ff.; cf. 'Εφ. 'Αρχ. 1895, pp. 221 ff.

<sup>5</sup> 'Εφ. 'Αρχ. 1906, pp. 211 ff.; cf. *Πρακτικά*, 1912, pp. 229 ff.

<sup>6</sup> Schliemann, *J.H.S.* 1881, pp. 122 ff.; Tsountas-Manatt, *Mycenaean Age*, pp. 126 ff.; Frazer, *Pausanias*, v. pp. 187 ff.; Bulle, *Orchomenos*, i. pp. 85 ff.; Fimmen, *Kretisch-Mykenische Kultur*, p. 201, "das der jüngermikenischen Periode angehört."

<sup>7</sup> *Ath. Mitt.* 1913, pp. 347 ff.

<sup>8</sup> *Ibid.* 1886, pp. 435 ff.; 1887, pp. 136 ff.; *Πρακτικά*, 1901, pp. 37 ff.; Tsountas, *Προιστ. 'Ακροπόλεις*, pp. 27, 152 ff.; Wace-Thompson, *Prehistoric Thessaly*, p. 82.

<sup>9</sup> Lolling, *Kuppelgrab bei Menidi*; Wolters, *Jahrbuch*, 1899, pp. 115 ff.

<sup>10</sup> 'Αρχ. Δελτίον, i., *Παράρτημα*, pp. 61 ff.; ii., *Παράρτημα*, pp. 25 ff.

<sup>11</sup> *Mon. Ant.* xiv. pp. 678 ff.; *Mem. Ist. Lomb.*, xxi. pp. 248 ff.; *Rend. d. Iincei*, 1905, pp. 391 ff.

<sup>12</sup> *Mon. Ant.* xix. p. 206.

<sup>13</sup> His monograph on these tombs has been recently published by the Liverpool University Press, *The Vaulted Tombs of Mesará*.

judge by those of Mochlos, Pachyammos, Zafer Papoura, Isopata and Kalyvia near Phaistos, were anything but tholoi.

A few Late Minoan tombs are not merely rock-cut chambers, but are built and vaulted. They are, however, rectangular in plan and not of the beehive shape. The earliest of these known is the Royal Tomb at Isopata,<sup>1</sup> which dates from L.M. II., while the others, such as the tombs of Maleme near Canea,<sup>2</sup> Damania<sup>3</sup> and Mouliana,<sup>4</sup> all date from L.M. III. The walls of the chambers incline inwards towards the top and form a kind of primitive barrel vault. Only at the very end of the Third Late Minoan Period do tholos tombs reappear in Crète, and they and the rectangular built tombs continue into the succeeding Early Iron Age of Geometric pottery, as shewn at Vrokastro,<sup>5</sup> Kourtes,<sup>6</sup> Erganos<sup>7</sup> and Kamares.<sup>8</sup> These later tholoi of Crete seem more likely to be due to the influence of the mainland than to the re-emergence of an indigenous type of sepulchre after long disuse.

So far then as the Cretan evidence goes, it does not seem possible that the tholos tomb was brought to Mycenae from Crete, more especially since the earliest Minoan objects from Mycenae are those of the Shaft Graves. Small tholoi of the Early Iron Age were found by Paton and Myres at Assarlik in Caria,<sup>9</sup> and more recently the American expedition at Kolophon has excavated a tholos tomb of the Third Late Minoan Period.<sup>10</sup> These facts suggest that it is possible that when the exploration of the early remains of Western Asia Minor can be undertaken, some clue to the origin of the tholos tomb may be found there. On the other hand, the late tholoi of Asia Minor, like those of Crete, may be only an importation from Mycenae.

For the present we have no information to guide us to the home of the tholos tomb: but whatever its origin, it was certainly still in a primitive form when it was first introduced at Mycenae. It was the

<sup>1</sup> Evans, *Prehist. Tombs*, pp. 136 ff.; similar but much inferior is Chamber Tomb 1, though also L.M. II. in date, Evans, *Tomb of Double Axes*, pp. 6 ff.

<sup>2</sup> *Ath. Mitt.* 1910, p. 150; Evans, *Tomb of Double Axes*, p. 9.

<sup>3</sup> *Αρχ. Δελτίον*, ii. pp. 171 ff.

<sup>4</sup> *Εφ. 'Αρχ.* 1904, pp. 21 ff.; cf. the tombs at Praisos and Plati, *B.S.A.* viii. pp. 245 ff., xx. p. 13, Pl. VI.

<sup>5</sup> E. H. Hall, *Vrokastro*, pp. 123 ff.

<sup>6</sup> *A.J.A.* 1901, pp. 287, 294, 302 ff.

<sup>7</sup> *Ibid.* 1901, pp. 262 ff.

<sup>8</sup> *Ibid.* 1901, pp. 439 ff. Cf. the Praisos Tomb, *B.S.A.* viii. pp. 240 ff.

<sup>9</sup> *J.H.S.* 1887, pp. 66 ff.

<sup>10</sup> *Art and Archaeology*, xiv. p. 259.

genius of the Mycenaean engineers and architects that, without the aid of any metal harder than bronze, transformed the mean vaults of the first group into marvellous subterranean cupolas like the Treasury of Atreus, which astonish the traveller to-day as much as they did Pausanias of old. The treasures of Atreus and his sons, which he dreamt of, have long since been scattered to the four winds, but the Mycenaeans in these triumphs of structural ingenuity have bequeathed imperishable treasures to the world.

A. J. B. WACE.

#### 6. ARCHITECTURAL NOTE.

The thesis of Mr. Wace, that the tholos tombs at Mycenae shew a chronological development, can, I think, hardly be disputed. The difference in material and workmanship between a tomb constructed of unworked local limestone and one built of carefully dressed or sawn blocks of hard conglomerate cannot be a matter of mere chance. It is a difference which must be due either to a development in time or to a very considerable difference in the wealth of the constructors. In the latter case the tombs built in poorer style, of less refractory materials, should be on a smaller scale than those which shew more costly workmanship. But this is not the fact; for the Tomb of Aegisthus, which shews no worked stone at all in its original building, is almost twice as large as the Panagia Tomb, where dressed poros and conglomerate are used, and is in fact only surpassed in size by one tomb in the whole series, the magnificently built Treasury of Atreus. No one who realises the difficulties involved in erecting without centering either a true or false dome of a diameter of fourteen metres could doubt that the builder of the Tomb of Aegisthus had employed all the resources of material and technique known to the craft in his day.

Granting, then, that the tombs are not contemporary, and that the builder of each one used the greatest skill at his command, it follows that the series must stretch over a considerable length of time, for the ability to saw and set huge blocks of conglomerate is not one to be acquired without long and continuous practice. The building of the tombs alone could not account for such a development; there must also have been constant exercise in other large-scale masonry construction over a period of many years to develop it.

The pottery finds, as Mr. Wace has shewn, confirm this conclusion.

They indicate that there was a difference of two hundred years between the earliest and the latest tomb.

The most surprising thing about his investigation, however, is the fact that he has been able to shew good reason for assigning to each one of the nine tombs a particular position in the developmental series. The last one of all is the only one which it seems to me at all possible to place otherwise than Mr. Wace has done. It is conceivable that the Tomb of Genii is as old as or older than the Tomb of Clytemnestra, though I think it more probable that Mr. Wace is right in considering it the last effort of a failing power. With this possible exception it seems certain that no two of the tombs were contemporary.

This fact points to an interesting assumption.

There are, in all probability, few, if any, more tholos tombs to be found in the vicinity of Mycenae, though there are probably a good many more chamber tombs still undiscovered there. This is due to the fact that the latter were built entirely below ground, while in the tholos tombs, as has been shown, the lintel was regularly set at the level of the natural grade of the hillside, bringing nearly half of the structure above ground. Even with a collapsed dome the presence of such a tomb could hardly have escaped notice in all the very thorough investigations of the region. We can say safely, then, that there were at Mycenae a series of nine or at most, say, a dozen tholos tombs, built over a period of something above two hundred years; and of the nine known ones no two are contemporary. This means that on the average they were built twenty to thirty years apart, or one, and only one, to each generation. The inference is obvious: they are the tombs of a dynasty of kings who ruled, from the downfall of the Shaft Grave Dynasty, until themselves overthrown when the Palace was destroyed. For nobles, and perhaps for a short-lived king—unless laid in his predecessor's tholos—chamber tombs had to suffice; the commoners probably were content with still more humble resting-places, while tholoi were reserved for royalty alone.

LEICESTER B. HOLLAND.

#### 7. APPENDIX.

##### *The Curled Leaf Ornament.*

This type of ornament is part of a necklace and frequently occurs in Mycenaean tombs in gold and glass paste. The various stages of its development can now be traced as follows.



The earliest dateable specimen is seen in a mould from Knossos made for casting faience and probably belonging to Middle Minoan III.<sup>1</sup> In Mr. Fyfe's drawing the ornament is inverted and treated as a bracket, and its likeness to many examples from Mycenae and elsewhere on the mainland<sup>2</sup> not remarked. The difference in width between the top (the plaque) and the bottom (the curl) of the ornament is also not noticed. The top is always narrower than the bottom, so that when threaded the ornaments, as the units of a necklace make a wide curve. It is also interesting to observe that the Knossian, like similar moulds from Mycenae,<sup>3</sup> was made for casting ornaments of the same type in a material that contracted in drying. For instance, in making casts in plaster-of-Paris in these moulds to-day, it is very difficult to extract the casts without breaking the more prominent portions. Materials that contract in drying are faience and glass paste. Many of the glass paste specimens from Mycenae are slightly curved at the back, thus shewing clear evidence of contraction. This can be further observed in some of the ornaments from the following detail. They should have been pierced through horizontally from side to side under the beaded edges of the covering plaque, but the curve of the ornament due to the contraction in drying prevents this, and the craftsman was obliged to bore oblique holes through the under angles (from side to back), see Pl. LXI. 2, *h*.<sup>4</sup> These moulds could never have been used for metal, as has sometimes been suggested.<sup>5</sup> Cast metal could not be extracted from the deep hollows, and they are quite unsuited for stamping metal plates. They could only, as M. E. Gillièron *filis*<sup>6</sup> has proved by experiment, have been used for casting faience, glass paste or some other material which contracts in drying.

It is remarkable that this ornament is scarce in Crete. There is one specimen of a lower curl in ivory from the South House at Knossos (Fig. 90)<sup>7</sup> (not later than L.M. I.), and there is one example in glass paste from the L.M. III. chamber tombs at Kalyvia near Phaistos.<sup>8</sup> On the contrary, it is very common on the mainland, where the earliest dateable example is probably that from Argos (see D below), and should be assigned to L.H. II., and the other examples in gold are probably of the same date. Certainly the specimens from Tomb 515 at Mycenae, which was first used in L.H. II., should be of that period. On the other hand, we could perhaps consider this ornament, when in glass paste,

<sup>1</sup> Evans, *Palace of Minos*, i. p. 488, Fig. 350.

<sup>2</sup> The specimen referred to from the Messenian Pylos ('Εφ. 'Αρχ. 1914, p. 103, Fig. 5) is in glass paste and not faience. It cannot be dated to L.M. I. *b*, as suggested, since it was found on the floor of the tholos tomb with other objects of late (L.H. III.) date, and not in one of the undisturbed grave-pits. It probably dates from the same period as similar glass paste examples from the mainland, and is therefore not earlier than the end of L.H. II.

<sup>3</sup> Schliemann, *Mycenae*, Figs. 162, 163 (Athens, Nat. Mus. 1019, 1020); Tsountas, 'Εφ. 'Αρχ. 1897, Pl. VII. 1 (Athens, Nat. Mus. 2567).

<sup>4</sup> From Tomb of Genii, Mycenae; Athens, Nat. Mus. 4542 = Fig. 89, *h*, above.

<sup>5</sup> Cf. Tsountas, 'Εφ. 'Αρχ. 1897, pp. 98 ff.

<sup>6</sup> We are much indebted to his skill for our knowledge of the technical points involved.

<sup>7</sup> Candia Museum, No. 194.

<sup>8</sup> *Mon. Ant.* xiv. pp. 632 ff., Fig. 106.

as typical of L.H. III. tombs on the mainland, although it is true that the earliest form of it in other materials is found in Crete. In any case ornaments in glass paste are not common in Crete, but extremely frequent at Mycenae and elsewhere on the mainland, and so perhaps the Kalyvia example might be an importation from Mycenae.

On the mainland its evolution can be followed in the examples described below.

In gold we have these specimens:—

A. Two pieces from Tomb 68 at Mycenae (Athens, Nat. Mus. 2936). These have formed part of a wide necklace. Each piece (length .04 m.) consists of three parts: (1) a long hanging curled leaf grooved at the edges and down the centre, and on the left of it from the spectator's point of view; (2) a straight sword-like leaf curving upwards and pierced at the tip, where by means of gold wire two or three small plain gold discs are attached. Both the leaves hang downwards and at the root slide into (3) a hollow square plaque. This plaque



FIG. 90.—CURLED LEAF IN IVORY FROM KNOSSOS.  
(Scale 2:3.)

has a beaded edge, top and bottom, through which pass the threads of the necklace. Its surface is decorated with a zigzag basket pattern. Pl. LXI. 1, *a*.

B. Five pieces (length .02 m.) of a necklace from Tomb 55 at Mycenae (Athens, Nat. Mus. 2846) similar to A, but smaller. The sword-like leaf is here on the right side of and in the same piece as the curling leaf. The gold plaque is decorated with a concave circle, which may have been filled with some coloured stone or other inlay. On each side of it is the half of two concentric circles which were completed by similar halves on the next units to the right and left. Pl. LXI. 1, *b*.

C. Two pieces from Tomb 515 at Mycenae. A more elaborate version (length .053 m.) made up of three leaves of thin gold leaf graduated in size and curling one upon the other, the largest hanging below. The leaves were made separately and fastened together with gold wire at the root, where there are four holes for the attachment of a plaque, which is missing. The two upper leaves are also attached to the lower one by fine gold wire passed through holes pierced in the side of the curl. With these were found two sets of the sword-like leaves similarly fastened together in threes (the upper one is partly broken away at the root, where there are again holes for attaching the covering plaque). From the pierced tips of the sword-leaves hang the usual plain gold

discs strung together with thin gold wire. These were all found at the north end of the grave-pit in the chamber of the tomb, and should belong to its earliest stage, L.H. II. Pl. LXI. 1, *c*.

D. Five pieces from a chamber tomb at Argos. Dr. Vollgraff illustrates <sup>1</sup> a composite ornament (length .053 m.) made of three curled leaves like C, all being fitted together in the same way with thin gold wire. The curls are decorated along the edge and down the centre with the fine granulated work which is typical of L.H. II. (compare the Vaphio and Kakovatos tombs <sup>2</sup> and Tomb 515 at Mycenae). There are two holes at the root for the attachment of the plaque. With these Dr. Vollgraff, though he did not group them together, found groups of three sword-like leaves <sup>3</sup> attached to one another in the same way, and with two holes at the root for fastening the covering plaque. All three leaves were pierced at the tip for the attachment of the usual gold discs, of which samples were found in the same tomb.<sup>4</sup> Pl. LXI. 1, *d*.

Finally, as a substitute for those who could not afford gold, Mycenaean craftsmen copied this ornament in glass paste. It must always be remembered that such ornaments in glass paste were usually covered with gold foil.<sup>5</sup> It is interesting to see how the craftsmen at first still blindly followed the method used for gold work, an extraordinarily clumsy and difficult process when applied to glass paste.

This is seen in :—

E. From Tomb 40 at Mycenae (Athens, Nat. Mus. 2495), where the pieces were each moulded separately, and fastened together as in the gold ornaments, but with slight simplifications. The top curling leaf (length .03 m.) is moulded in one with the top curved sword-like leaf and with the plaque, which has the usual beaded edges intended to be pierced with holes for the thread of the necklace and the concave circle for inlay (Pl. LXI. 2, *c*). The second leaf (length .032 m.) is moulded in one with a sword-like leaf curving at the side (Pl. LXI. 2, *d*, *i*). Its root is plain and tapering and pierced in two places from front to back for attachment to the upper leaf by means of a gold wire passed through the holes in the curl (Pl. LXI. 2, *e*). Being in paste the curls had to be cast solid and then pierced horizontally.<sup>6</sup> The second leaf having

<sup>1</sup> *B.C.H.* 1904, p. 384, Fig. 17; Athens, Nat. Mus. 5564.

<sup>2</sup> *Ath. Mitt.* 1909, Pls. XIII. (27), XIV. (1); 'Εφ. 'Αρχ. 1889, Pl. VII. (7).

<sup>3</sup> Athens, Nat. Mus. 5572.

<sup>4</sup> *B.C.H.*, *loc. cit.*, Fig. 14; Athens, Nat. Mus. 5571.

<sup>5</sup> There is one example of the ornament under discussion in the National Museum. Athens (Case 51 in the Mycenaean Room, no inventory number attached), which still has some of the gold foil adhering to it, and there are many specimens with the gold discs attached (e.g. Athens, Nat. Mus. 2309 from Tomb 24, Mycenae; 'Εφ. 'Αρχ. 1888, Pl. IX. 9), and one (Athens, Nat. Mus. 2829, Mycenae Tomb 55) with discs of glass paste hanging from it.

<sup>6</sup> These holes were in many cases pierced after the casting, but the incised lines which appear at the side of the curl in the mould from Mycenae (quoted above, Schliemann, *Mycenae*, Fig. 162) shew that the craftsmen sometimes inserted a wire through the curl at the time of casting so as to produce this hole with less trouble.

this horizontal hole through the curl shews that a third leaf might at one time have been fastened below it. The two sword-like leaves are both pierced at the tip for the attachment of gold discs.

This must have been a very clumsy ornament and also very fragile, for the superimposed layers of glass paste all depend on the thin plaque. But the craftsman soon changed his technique to suit his material and took to casting this composite ornament of two or more curls together with the sword-like leaves and the covering plaque at the root all in one piece, as can be seen in the Mycenae moulds. We thus have solid cast examples with two,<sup>1</sup> with three<sup>2</sup> or with four<sup>3</sup> curled leaves, and the corresponding number of sword-like leaves. As it was not easy, as already remarked, to pierce holes from side to side under the beaded edges of the root owing to the curve caused by contraction in drying, the craftsman took to piercing two or four holes from front to back through the sunk circle originally intended to receive inlay (Pl. LXI. 2, *a, b, f*). In these castings the sword-like leaf is usually on the spectator's right, but there are one or two examples in which it is on the left.<sup>4</sup> The ornament in this form, cast solid, is very common in all late Mycenaean tombs, and is one of the characteristic ornaments of the L.H. III. period. In one case<sup>5</sup> small discs of glass paste have been substituted for the usual pendant gold discs.

The early specimens in gold and the first substitutes in glass paste are small and neatly made. On the other hand, the examples from late tombs (later L.H. III.), for instance, those from Spata (Pl. LXI. 2, *b*), are large, clumsy and vulgar. Art and craftsmanship began to degenerate after the middle of L.H. III. and beauty and simplicity were replaced by ostentation and size. Facility in technical skill and mass production had led to the inevitable result.

A curious and a late development of this ornament is perhaps to be seen in another piece of decorative glass paste found in one of the rooms of Tsountas' House<sup>6</sup> to the south of the Grave Circle at Mycenae. The original form of the ornament was by now forgotten and obscured. It was apparently inverted, and the beaded plaque with the sunk circle has now become the bottom, and there are no holes for threading pierced through the beaded edges from side to side. Above the plaque are two curled leaves, but no sword-leaves, unless indeed the knobs on the left of the curls, which are somewhat more prominent, are the remains of the points of the sword-leaves. The third curling leaf has been replaced by the head and bust of a woman, which is pierced horizontally,

<sup>1</sup> Pl. LXI. 2, *f*, Athens, Nat. Mus. 2279, Mycenae Tomb (?); Pl. LXI. 2, *g*, Athens Nat. Mus. 2495, Mycenae Tomb 40.

<sup>2</sup> Pl. LXI. 2, *b*, Spata, Athens, Nat. Mus. 2071.

<sup>3</sup> Pl. LXI. 2, *a*, Athens, Nat. Mus. 4550, Mycenae Tomb 93.

<sup>4</sup> *E.g.* Athens, Nat. Mus. 2513, from Tsountas' House, 'Εφ. 'Αρχ. 1887, Pl. XIII. 12, 18. In some specimens the ribs of the curled leaves are beaded, an obvious imitation of the granulated gold work seen in the Argos specimens, D above.

<sup>5</sup> Mycenae Tomb 55, Athens, Nat. Mus. 2829.

<sup>6</sup> *Πρακτικά*, 1886, p. 78; 'Εφ. 'Αρχ. 1887, Pl. XIII. 23.

through the shoulders for threading. She has a prominent nose and a receding mouth, wears a necklace and holds her breasts with her hands. As suggested by Tsountas, she probably would be a mother or nature goddess, especially since in the same room were found four fragmentary figurines,<sup>1</sup> also of glass paste, shewing a goddess of the same type, but represented as a full-length figure and not worked into the form of this ornament.

A. J. B. WACE.

<sup>1</sup> 'Εφ. Αρχ. 1887, Pl. XIII. 24.

## EXCAVATIONS AT MYCENAE.

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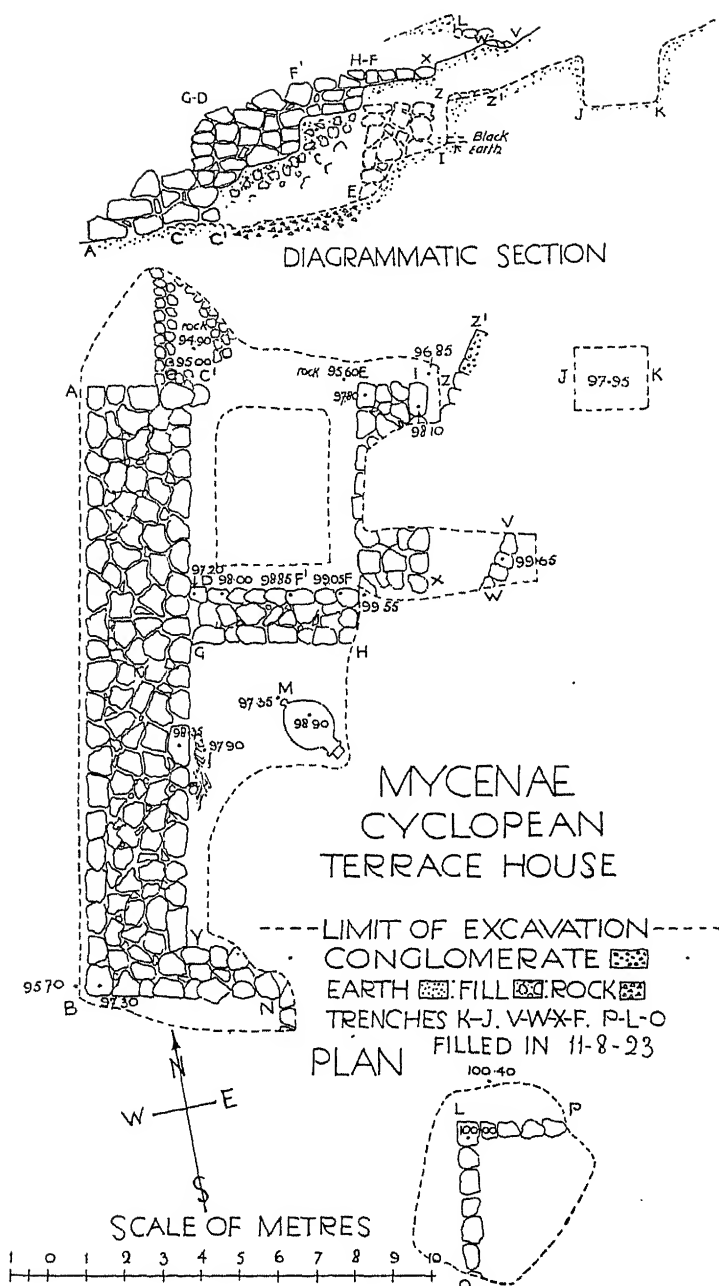
### § X.—THE CYCLOPEAN TERRACE BUILDING.

(PLATE LXII.)

In 1922 we had heard rumours of the existence of a Cyclopean building to the west of the Lion Tomb and on the north or reverse side of the ridge from the Tomb of Clytemnestra. We dug here for one day then and verified the presence of big walls. Accordingly, during our brief campaign in 1923, we could not resist the temptation to see what this building might be, as it lies well outside the acropolis and outside the Hellenistic wall of the lower town, and in an area where no Mycenaean ruins have yet been excavated.

The plan in Fig. 91 shews the extent of wall we were able to trace. On the west at the foot of the slope we found a very heavy wall built in Cyclopean style with large blocks of limestone. It is 2.70 m. thick, in places as much as 2 m. high, and runs along for a distance of 15 m., and may have extended still further northwards. A wall returns at right angles from this straight into the hillside, and divides the space behind it into two sections, which we have provisionally called the north and south chambers. The north chamber is surrounded by walls on three sides with the north end open. There seems to be no floor, and the walls are founded on the rock, which here rises gently from west to east.<sup>1</sup> Outside, at the north-west angle of the chamber there seems to be a kind of rough cobble pavement laid on the rock. The chamber, except for a thin stratum of surface humus, was completely occupied by a loose mass of rough limestone fill, among which L.H. III. potsherds, especially fragments of large stirrup vases, were common. Just at the north-east angle of this chamber and for a little way on the east side of the east wall (and 1.25 m. below its top) we found a thin stratum of

<sup>1</sup> See the section in Fig. 91.



soft black earth with veins of grey, probably ash, which contains a good deal of L.H. III. pottery. Attempts to find the continuation of these walls further east led to no result up to the time when we were compelled to break off our excavations. Two shallow, probably modern, terrace walls were found just on the surface, but they have nothing to do with the Cyclopean building. In the black earth mentioned we found this pottery :—

Late Helladic II., one piece with stippled or thrush-egg pattern.

Handleless cups, a few pieces.

Late Helladic III., a quantity among which the common shapes are kylikes, painted (murex and network patterns) and unpainted.

Deep bowls, several, some of which are covered with black glaze.

Shallow bowls with horizontal ribbon handles unpainted.

Coarse ware, including three-legged cooking-vessels.

With this there were a few fragments of plain white stucco. In a trial pit to the east in addition to a good deal of L.H. III. ware of similar character there was one piece of L.H. I. ware with added white and about ten fragments of L.H. II.

The southern chamber is apparently much larger, but we were not able to trace out its eastern or southern walls. This, like the northern chamber, was, except for the usual surface humus, entirely occupied with a loose fill of limestone rubble, in which a good deal of pottery was found as follows :—

Late Helladic III., common, usual shapes :—

Kylikes, painted (ordinary patterns) and unpainted.

Stirrup vases, especially large ones like those from Zygouries or the inscribed examples from Tiryns and Thebes.

Deep bowls, usual patterns.

Large amphorae or jugs, painted and unpainted.

Shallow bowls with horizontal ribbon handles, unpainted.

Coarse domestic ware, including three-legged cooking-vessels.

Geometric ware, about six sherds.

Proto-Corinthian ware, one piece.

Orientalising ware, one sherd.

Black glazed Hellenic, a little.

Miscellaneous, an archaic terracotta ram and a late Greek lamp with

MNA  
 7NOC inscribed on base.



On the top of the fill and not far below the surface we found two burials. One was a simple unenclosed interment lying, as shewn in the plan, by the side of the west wall. The skeleton, which was much decayed, had lain with its head to the north and seemed to be that of an adult, but the bones were in too bad a state for further details to be made out. Between the legs there was a small stirrup vase (height .10 m.) of the usual globular shape typical of Tell-el-Amarna, but not of the Tell-el-Amarna style or patterns: round the body there are simple lines with a wavy line round the middle; on the shoulder are concentric semi-circles and dashes; the clay is soft and greenish-yellow; the paint is



FIG. 92.—CYCLOPEAN TERRACE BUILDING: STIRRUP VASE (L.H. III.)  
FROM GRAVE. (Scale 1 : 2.)

thin and poor, and has almost vanished; bad condition; L.H. III., but not as late as the Granary Class (Fig. 92).

To the east of this (see Fig. 91, Pl. LXII. 2) was a large pithos 1.70 m. high with a diameter of 1.12 m. at the widest part of the body, and about .60 m. at the mouth. The pithos, which has elaborate applied and incised decoration, lay on its side and was obviously intentionally so placed for the stones of the fill were carefully packed round it. In its mouth was a small vessel of similar fabric, roughly made of thick brick-red clay. This has a diameter of .53 m. at the top and .41 m. at the bottom, and is about .60 m. high, and has a flat base, vertical sides and two horizontal loop handles just under a heavy rolled rim, one on each side. This

seems to have been inserted in the mouth of the pithos as a kind of stopper, and to have been filled with stones, which had caused its base to break away and fall into the pithos. In the pithos were the bones, much decayed, of one skeleton, apparently that of an adult. With them were three vases :—

1. Stirrup vase, height .12 m., of Tell-el-Amarna style, and the usual globular shape, but later in date; thick and thin lines on the body; hatched triangles on shoulder; cross hatchings on handle; there is a small hole in the shoulder on the side opposite to the spout; though a late specimen of L.H. III., yet by no means so late as the stirrup vase from Tomb 502, which is of the Granary Class. Pl. LXII., 1 *b*.

2. Stirrup vase, height .09 m., of depressed globular shape; no pattern on shoulder; thin and thick lines round body; post-Tell-el-Amarna in style; small hole at base of spout; same date as No. 1; L.H. III. Pl. LXII. 1 *c*.

3. Small jug, height .08 m., plain bands round body and shoulder and neck in thin washy black paint. L.H. III., same date as Nos. 1 and 2. Pl. LXII. 1 *a*.

That L.H. III. burials should be found on the top of the fill in this chamber is important, for it shows that the fill was put in early in L.H. III., for the vases though late in style do not belong to the Granary Class, the latest phase of L.H. III. pottery. Therefore the building itself cannot be later than the beginning of L.H. III. This date suits well with the Cyclopean style of the walls, which much resemble those of the citadel.

A little to the south-east we found the angle of another wall of the same style, but we had not the time or means to investigate it.

The purpose of this building remains obscure. We have obviously found part of a large and important structure dating at latest from the beginning of L.H. III. The absence of floors is remarkable, so that it does not seem to be a house. As stated, this is the first big building at Mycenae not definitely a tomb so far discovered outside the acropolis wall and the Hellenistic town wall, and it therefore deserves complete clearing and thorough investigation. This, however, must be left for other and more fortunate archaeologists.

A. J. B. WACE.

## EXCAVATIONS AT MYCENAE.

### § XI.—HELLENISTIC MYCENAE.

#### I. A NEW INSCRIPTION.

AMONG the ruins of the Hellenistic buildings at the south end of the Great Ramp, in the fourth or southern chamber (Pl. I. 34), three fragments of a stele (now in the Nauplia Museum) were found. The stele is of a simple and common type, and is made of the same white limestone as the other Mycenaean stele found by Tsountas,<sup>1</sup> which it closely resembles even in its weathering. Except for the top left-hand corner and a gap on the right side the whole stele is preserved. It is .969 m. in height, .41-.436 m. in breadth (.41 m. at the ninth line of the inscription) and .11-.125 m. thick. At the top there is a plain frieze, .065 m. high : .02 m. below the frieze begins an inscription which fills twenty lines and ends .50 m. above the bottom of the stele. The letters are .008-.01 m. high. The space between the lines is .009-.011 m. The surface of the stone is very much worn, and it was consequently difficult to make out the letters and their accurate forms. The sketch (Fig. 93) shows the arrangement of the text. After repeated close examination I was able to read as follows :—

Θεός·

- [ἀλῖαι]αι ἔδοξε [τε]λείαι  
 [τῶν Μ]υκανέων, Ἀρ[ν]ήου [ύσ-]  
 [τερα]ίαι πρατομη[ν]ίας, [ἀ-]  
 5. [ρήτε]νε δαμιοργῶ[ν - -]  
 [- -]ς Ἀγ[ι]έος· δεδό[χ]θαι τῶι  
 [κοιν]ῶι τῶν Μυκαν[έ]ων Δα-  
 [μ]οκλείδαν Θεοδώ[ρο]ν Λακε-  
 [δα]ιμόνιον αὐτὸν κ[αὶ] ἐγγό-  
 10. [ν]ους αὐτοῦ καλίσθα[ι ἐς προ-]  
 εδρίαν τοῖς Διουνσί[οις καθά]  
 καὶ τὸν ἄ[λλου]ν εὐεργέ[ταν καὶ ἀ-]

<sup>1</sup> I.G. iv. 497.

- [ν]ανεώ[άσθαι τοῖς Λακεδαιμονί-]  
 [οις τ]ὰν κοινανίαν ἀγ[ώνων ὦν]  
 15. [ἀ] κώμα τίθητι· ἀγγράψ[αι δὲ τὸ δό-]  
 κημα ἐν στάλαι ἐν τῷ [ιαρῶν· τὸν]  
 δὲ ἀγωνοθέταν τ[ὼν Δι]ο[νυσίων]  
 καὶ τὸν δαμοργόν τ[ὸν ἀντι-]  
 τυγχάνοντα ἐπιμέλ[εσθαι ἀπο-]  
 20. δῆ[ξ]αι ταῦτα.

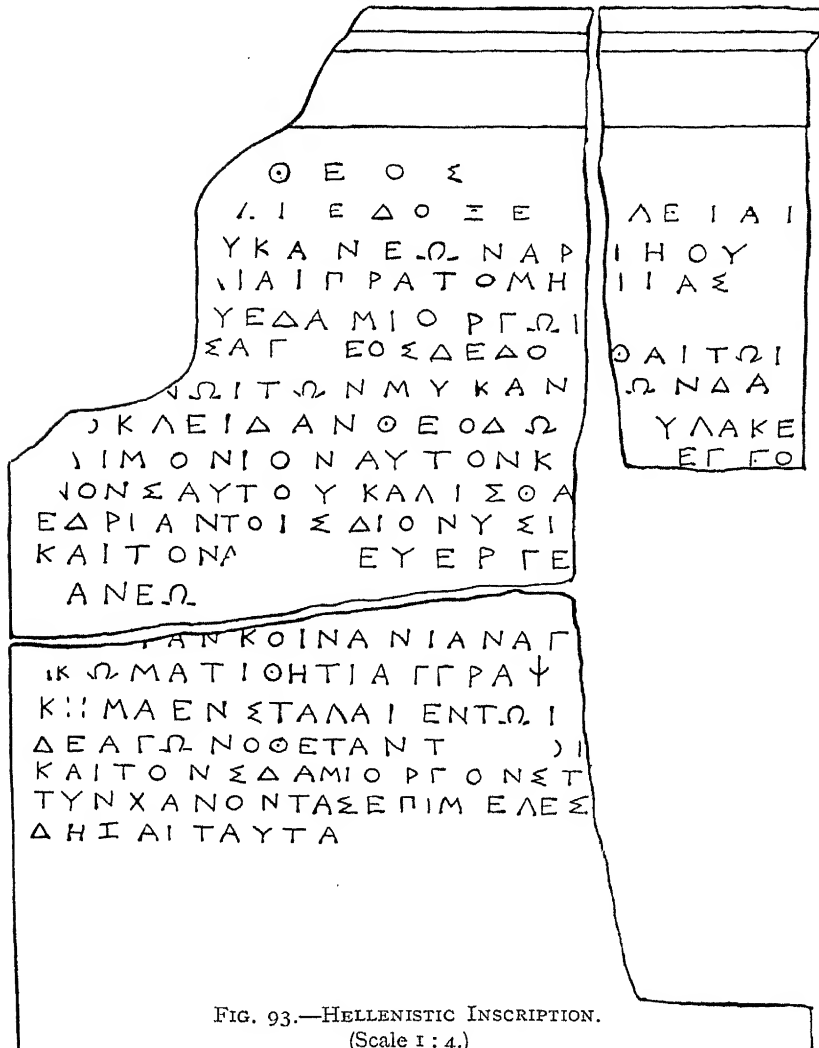


FIG. 93.—HELLENISTIC INSCRIPTION.  
 (Scale 1 : 4.)

*Lettering and Date.*

In the fifth line the letters ΔΙΟ are perhaps to be read, Δ being above the interval between Θ and Α in the sixth line.

The outer bars of Σ are generally oblique but with a tendency to become parallel. Α, Η, Ι, Λ, Μ, Ν, Ρ, Τ, Υ show *apices* or (more properly speaking) thickened ends. Ρ has a somewhat rectilinear character. The right vertical line of Π is about half as long as the left. In Ω the small lines at the bottom are sometimes distinctly separated and do not branch off directly from the body of the letter. Ο and Θ are small, Υ has a strikingly high stem.

The restoration proposed above gives lines of 19–25 letters corresponding to the extant parts of the inscription. The lettering of the later lines (see Fig. 93) is much closer than that of the earlier lines. Thus line 3 shows 13 letters in .30 m. measured from the left margin, line 18 has 18 letters in an equal space. It may be noted that in the Mycenaean inscription, *I.G.* iv. 497, the lines vary from 25–34 letters.

The date of the inscription can be fixed approximately by the general character of the letters. They shew exactly the same type as those of the Mycenaean inscription already mentioned, which is dated about 195 B.C., a type somewhat more advanced than that of the third-century inscriptions found by Vollgraff in the agora at Argos.<sup>1</sup>

This date is confirmed by the dialect and phraseology of our inscription, which shews the closest affinity to *I.G.* iv. 497. Both are in the late Argolic dialect, which was influenced by the κοινή, and is now well known from the Argive inscriptions published by Vollgraff in *Mnemosyne*.<sup>2</sup>

It is clear that our inscription is a decree of the Argive κώμα of Mycenae, which was founded in the Hellenistic age<sup>3</sup> on the site of the free city of Mycenae, which had been destroyed by the Argives in the fifth century B.C. after the battle of Plataea.

<sup>1</sup> Cf. *Mnemosyne*, xliii. 1915, p. 366.

<sup>2</sup> *Mnemosyne*, xliii. pp. 366 ff.; xliv. pp. 64 ff., 219 ff. Cf. the collection given by Schwyzler in his *Dialectorum graecarum exempla epigraphica potiora* (Leipzig, 1923), pp. 40 ff., and the list of material in Bechtel's *Die griechischen Dialekte*, ii. (Berlin, 1923), pp. 437 ff. For the dialect see especially Bechtel, *ibid.*, *Mnemosyne*, xliv. pp. 69 ff., and the summaries given by Buck in his *Introduction to the Study of the Greek Dialects*, p. 148, and by Thumb, *Handbuch der griechischen Dialekte*, pp. 106 ff. See also the monographs by von Friesen and Hanisch (v. Friesen, *Ueber die Sprache der argeischen Dialektinschriften*, *Språkvetenskapliga sällskapets förhandlingar*, 1894–1897, Upsala; Hanisch, *De titulorum argolicorum dialecto*, Göttingen, 1903).

<sup>3</sup> See below, p. 422.

In fifth-century Argive inscriptions<sup>1</sup> *ι* occurs for *ει* (*ε+ε*) and in another Mycenaean inscription<sup>2</sup> we have *καλίσθαι* which recurs in our inscription (l. 10). In an inscription published by Vollgraff<sup>3</sup> *φάι* shews that the diphthong *ει* was also pronounced *ι*. Consequently *η* in - - - *δη(ξ)αι* (for *δειξαι*) in l. 20 of our inscription was probably pronounced *ι*.<sup>4</sup> In the third-century Argive inscriptions *η* and *ει* are used promiscuously<sup>5</sup> and in our inscription we have both *[τε]λείαι* and *Ἀρ[ν]ήου*.<sup>6</sup> It is further to be noted that the new Mycenaean inscription preserves the main characteristics of the language of the official Argive third-century decrees, e.g. retention of *-νς* (*ἐγγόνους*, *δαμιοργόνους*, *τόνους*). The loss of intervocalic *σ* is usual in later Argolic and persists in third-century decrees; consequently I propose *[ἀν]ανεώ[ασθαι]* in line 13.<sup>7</sup> I also suggest the common Doric *ίαρῶι*<sup>8</sup> in line 16. In the Argive third-century decrees *ι* occurs instead of *ε* before *ο* in *Θιο-* in proper names, a point of agreement with a phonetic law well known from certain Doric districts.<sup>9</sup> *Θεοδώ[ρο]ν* in the eighth line of our inscription does not necessarily disqualify it for a date about 200 B.C. Damokleidas was a foreigner, and in a third-century decree from Argos published in *Mnemosyne*, xliii. pp. 366 ff., a *Θεογένης Θεοκλέους Μύνδιος* occurs next to an Argive *Θιογένης Θιοκλέος*.

### Commentary.

L. 1. *Θεός*. The opening *Θεός* occurs in Argive decrees: *Mnemosyne*, xliv. p. 221; *I.G.* xii. 3, 1259; cf. *Θεοῖς*, *I.G.* iv. 497.

L. 2. *[ἀλιαῖ]αι ἔδοξε [τε]λείαι*; cf. *I.G.* iv. 497 and the Argive decrees published by Vollgraff in *Mnemosyne*, xliii., xlv.; *B.C.H.* xxxiv. p. 331 (= Dittenb. *Syll.*<sup>3</sup> 56; Schwyzzer, *op. cit.*, No. 83). The word

<sup>1</sup> Dittenb. *Syll.*<sup>3</sup> 56; cf. Bechtel, *Die griechischen Dialekte* (quoted below as Bechtel), p. 440; *Mnemosyne*, xlv. p. 70 (*ἰρῶνα* naturally cannot be taken as an example, cf. Bechtel, p. 481).

<sup>2</sup> *I.G.* iv. 497.

<sup>3</sup> *B.C.H.* xxxiii. p. 451.

<sup>4</sup> Cf. *ἀποδείξει*, *Mnemosyne*, xlv. p. 220 = Schwyzzer, *op. cit.*, No. 91; Bechtel, p. 497. In our inscription - - - *δη(ξ)αι* is a remarkably early instance of *η* for *ι*; cf. Brugmann-Thumb, *Griech. Grammatik*,<sup>4</sup> pp. 35 ff.

<sup>5</sup> Bechtel, pp. 450 ff.; Thumb, *op. cit.*, p. 107; Hanisch, *op. cit.*, p. 28.

<sup>6</sup> *Mnemosyne*, xlv. p. 65 = Schwyzzer, *op. cit.*, p. No. 90.

<sup>7</sup> Bechtel, pp. 462 ff., cf. p. 448.

<sup>8</sup> *Mnemosyne*, xliii. p. 378; xlv. p. 65, l. 20; cf. *ibid.*, l. 111 and p. 221, l. 28: *ίερῶι*.

<sup>9</sup> Bechtel, p. 446. In later Argive inscriptions *Θεο-*: *Jahresh. (Beiblatt)* 1911, p. 146.

ἀλιαία was used for the assembly of the κώμα of Mycenae as well as for the general assembly of the whole Argive δᾶμος. For τέλειος see Bechtel, p. 513 and Vollgraff, *Mnemosyne*, xliv. p. 47, who convincingly shews that τέλειος is to be understood as κύριος in Attic decrees (cf. Aristotle, *Ath. Pol.* 43 and Dittenb. *Syll.*<sup>3</sup> 56, where a ἀλιαία τῶν ἱερῶν occurs).

The Mycenaean decrees prove that in Mycenae a ἀλιαία τελεία used to fall each month on the second day; see l. 4 and cf. *I.G.* iv. 497, Πανάμου ὑστεραίαι πρατομηνίας, *I.G.* iv. 498, [ὑσ]τεραίαι πρατομηνίας.<sup>1</sup>

L. 3. Ἀρ[ν]ήου [ὑστερα]ίαι πρατομη[ν]ίας. The second day of the month Arneios, which was a spring month; Panamos, the month of the Mycenaean decree, *I.G.* iv. 497, was June–July.<sup>2</sup>

L. 4. [ἀρήτε]νε δαμοργῶ[ν]. The δαμοργοί were the council of the κώμα (cf. *I.G.* iv. 497, 498). If not due to influence from other Argive κῶμαι (from which we have no evidence as yet) this might indicate a desire to connect the Hellenistic κώμα of Mycenae with the free town of Old Mycenae, the council of which also consisted of δαμοργοί (*I.G.* iv. 493, αἱ μὲ δαμοργία εἶε; *I.G.* iv. 506, from Argos (?) [α]ἱ δὲ μὲ δαμμο[ρ]γοῖ τις). It may be noted that the evidence for δαμοργοί in Argos is very scanty (cf. Thucydides, v. 47); in fifth- and third-century decrees the βωλιά occurs together with the ἀλιαία (ἀρήτενε βωλᾶς, *Mnemosyne*, xliii. pp. 366 ff., xliv. p. 221; Dittenb. *Syll.*<sup>3</sup> 56 B, l. 25). ἀρήτενε, which also recurs *I.G.* iv. 497, 498, is the common Argolic term for presiding, cf. Bechtel, p. 460; Dittenb. *Syll.*<sup>3</sup> 261, and it takes the genitive (δαμοργῶν, βωλᾶς).<sup>3</sup>

L. 6. - - - σ Ἀγ[ι]έος. An Ἀγιεύς is mentioned in a fifth-century inscription found at Koutsopodi near Mycenae, *I.G.* iv. 553, l. 5. Bechtel in *Die historischen Personennamen* has only Ἀγεύς, Dittenb. *Syll.*<sup>3</sup> 314 B, l. 13, but cf. Ἀγίας.

δεδό[χ]θαι τῶι [κοιν]ῶι. Four letters are wanted; [δάμ]ωι is unlikely for that reason, and because δᾶμος is the word for the whole Argive

<sup>1</sup> In *I.G.* iv. 498 the restoration of the first line [Θεοῖς· ὑσ]τεραίαι is clearly incorrect. To ὑστεραίαι πρατομηνίας the name of a month is required, and there is room enough for a restoration such as [Ἀρνήου ὑσ]τεραίαι κ.τ.λ. That Θεός or Θεοῖς is by no means a necessary opening is shown by the Argive decrees, *Mnemosyne*, xliii. pp. 366 ff.

<sup>2</sup> See my paper, *Der Argivische Kalender* (*Uppsala Universitets Årsskrift*, 1922, 1, pp. 50 ff.).

<sup>3</sup> Brandis' suggestion (Pauly-Wissowa, Vol. V. p. 2174) is incorrect.

people,<sup>1</sup> of which the Mycenaean *κωμέται* were a part; cf. l. 15 and *I.G.* iv. 497, l. 11, *δεδόχθαι τοῖς κωμέταις*; *I.G.* iv. 498, l. 2, *τῶν κώμαι*. On the other hand, *I.G.* iv. 1111 has *τὸ κοι[ν]ὸν τῶν Ἀσι[ναίων]* (about 229–224 B.C.).<sup>2</sup> This inscription belongs to a monument dedicated in honour of the Argive tyrant Aristomachos II by the *κώμα* of Asine in Argolis. Asine is now well known as a Hellenistic *κώμα* through the Swedish excavations and by an inscription found by Vollgraff.<sup>3</sup> The use of the word *κοινόν* for the citizens of an Argive *κώμα* is thus confirmed; it also recurs in Rhodes and Crete for the citizens of cities or villages.<sup>4</sup>

Ll. 7 ff. *Δαμοκλείδας* is, as far as I know, not found elsewhere; *I.G.* iv. 497 confers the *προεδρία* at the Dionysia with the same words upon a foreign *εὐεργέτας*, but it also gives an explanation, lacking in our inscription.

L. 11. *τοῖς Διονυσί[οις]*. The Dionysia were obviously the great festival of the *κώμα*. The Hellenistic Theatre of Mycenae was probably connected with them, see below, pp. 418 ff.

[*καθὰ*] *καί*. *I.G.* iv. 497, *καθάπερ καί*; *I.G.* iv. 842, *καθὼς καί*. For *καθά* cf. *Mnemosyne*, xliv. p. 221, l. 30, and the Boeotian inscriptions published in *Ἐφ. Ἀρχ.* 1919, p. 80 (115, 116).

L. 12. *τὸν ἄ[λλον] εὐεργέ[ταν]*. In *I.G.* iv. 497 we have—as practically always in decrees of this kind—*καθάπερ καὶ τὸν[ς] ἄλλο[νς] εὐε[ργέ]τανς*.<sup>5</sup> In our inscription it is, however, impossible to suggest that *ς* after *τὸν* could have been omitted by error and to propose: *καὶ τὸν(ς) ἄ[λλονς] εὐεργέ[τανς] ἀ[ν]ανεώ[ασθαι] δέ κ.τ.λ.* This would involve giving up the natural wording *καλίσθαι[ι - - καὶ ἀν]ανεώ[ασθαι]*, which is suggested above in conformity with *I.G.* iv. 497. Moreover, not even the most closely written lines of our inscription allow six letters in a space equal to that between *τὸν* and *εὐ*. Perhaps at the *ἀλῑαία τελεία* of Arneios, or

<sup>1</sup> Cf. *Mnemosyne*, xliii. p. 372, xlv. p. 221; *I.G.* xii. 3, 1259.

<sup>2</sup> Wilhelm, *Beiträge zur Griechischen Inschriftenkunde*, p. 110 (*Anzeiger der phil.-hist. Klasse der Akad. der Wissenschaften in Wien*, 1921, xviii).

<sup>3</sup> Persson, *Asine* (*Bulletin de la Société des lettres de Lund*, 1922–23); *Jahrbuch*, 1922, p. 305; *Mnemosyne*, xlv. p. 221, l. 32, *Μενέδαμος Ἀσίνα*; cf. *ibid.* pp. 54, 232. The πόλις τῶν Ἀσιναίων mentioned *I.G.* iv. 679 is clearly the Messenian city; cf. Pausanias, iv. 14, 3. Cf. also the *κοινεῖα* of Troizenian *κῶμαι*, *I.G.* iv. 757.

<sup>4</sup> Cf. Kalén in *Strena philologica Upsaliensis* (1922), pp. 195 ff.; *G.D.I.* 4264 (*τὸ κοινὸν τῆς πτοίας*, cf. Herwerden, *Lexicon suppletorium*, s.v. *πτοία*), 4269, 4271, 4275 (Rhodes), 5171, 5176 (Crete). Cf. also in Thessaly, *ibid.* 361 (*ἔδοξε τοῦ κοινού τῆς πόλεως*), 1557.

<sup>5</sup> Revised on the stone in the National Museum, Athens: cf. Larfeld, *Griechische Epigraphik* (Müllers Handbuch, i. 5), pp. 395 ff.



before, one other *εὐεργέτας* had obtained the privilege of a front seat in the Mycenaean theatre and our Damokleidas received the same honour. Or is τὸν ἄ[λλον] εὐεργέ[ταν] collective?

Ll. 13 ff. [ἀν]ανεώ[ῃσθαι] κ.τ.λ. The term *ἀνανεώσθαι* no doubt implies more or less vague reminiscences of Old Mycenae. The friendship between Sparta and Old Mycenae, e.g. in the Persian war, was traditional and well known.<sup>1</sup>

L. 15. ἀγγράψ[αι δὲ τὸ δό]κημα: *δόκημα* is the typical Argive word for *δόγμα*, *ψήφισμα*, as is known from Argive decrees published in *Mnemosyne*, xliii., xliv.

L. 16. ἐν τῷ [ἱαρῶι]. The other Mycenaean decree, *I.G.* iv. 497, which resembles ours closely, was found by Tsountas<sup>2</sup> in the upper strata above the Mycenaean (L.H. III.) house, now known as Tsountas' House, which lies immediately to the south of the unexcavated piece directly adjoining the South House (Pl. I. 54-58) on the south. Thus the finding places of Tsountas' decree and of ours are separated only by the unexcavated piece, which may perhaps still contain other Mycenaean inscriptions. On the other hand, *I.G.* iv. 498, which is a heavy, cubical block (not a slab), was found on the summit of the Acropolis by the ruins of the Doric Temple. Thus no doubt the Mycenaean set up their decrees in the well-known archaic shrine of Athena<sup>3</sup> on the top of the Acropolis (as, for instance, the Argives in the *ἱαρὸν τοῦ Ἀνκείου*, *Mnemosyne*, xliii., xliv.). In our inscription, in l. 16, there is just space enough for *ἱαρῶι*. Probably our inscription and *I.G.* iv. 497 were originally set up in the *ἱαρὸν*, i.e. the precinct of the Doric Temple on the summit of the Acropolis, and were later removed to the places where they were found. The temple, the foundations of which are still preserved, was probably spared at the sack of Old Mycenae, as was also, according to Pausanias,

<sup>1</sup> Perhaps in *I.G.* iv. 497, l. 15 we should read:—

καλῖσθαι - - Πρότιμον - - [αὐτὸν καὶ ἐγγό-]  
15 [ν]ους καὶ τῇ[ν κοινανίαν ἀγώνων δὴν ἂν κώμα]  
[τίθῃσι ἀνανεώσθαι τοῖς Γορτυνίοις]  
[ἀγγράψαι] κ.τ.λ.

The restoration proposed in *I.G.*, *loc. cit.* (καὶ τὰ ἄλλα ὑπάρχειν - -), though it has good parallels in Argive decrees (*Mnemosyne*, xliii. pp. 372 ff), is somewhat difficult, as the phrase about the ἄλλοι εὐεργέται is already used in l. 13. Old connections existed between Argolis and Crete; cf. Dittenb. *Syll.*<sup>3</sup> 56; Schwyzer, *op. cit.* Nos. 83, 84.

<sup>2</sup> 'Εφ. 'Αρχ. 1887, p. 156.

<sup>3</sup> *Jahrbuch*, 1901, p. 18; *I.G.* iv. 492.

the temple of Apollo Pythaios at Asine.<sup>1</sup> It probably still stood in Hellenistic times, but, as Pausanias does not mention it, may have been in ruins by the time of Hadrian.

L. 18. [ἀντι]τυνχάνοντας. This was the proper Argolic term, known from the sixth- or fifth-century decree, *I.G.* iv. 554 (ἡ βουλὴ - - ἀντιτυχόουσα), as well as from the first century B.C. (*I.G.* iv. 932, l. 58, τοὺς ἀεὶ ἀντιτυνχάνοντας δαμιουργούς).<sup>2</sup>

L. 19. ἐπιμέλεσθαι with infinitive; cf. Thucydides, vi. 54, 6; Xenophon, *Oec.* xi. 17, xx. 9.

The meaning of the phrase is perfectly clear: ἐπιμέλεσθαι τῆς τε ἀναγραφῆς τῶν ἐψηφισμένων καὶ τῆς ἀναθέσεως τῆς στήλης.<sup>3</sup> As the sketch (Fig. 93) shews, the stone has -δηζαι, which is impossible. As in our inscription ξ is written Ξ, Ψ here is obviously an error for Ξ; cf. *I.G.* iv. 1345; Larfeld, *op. cit.*, p. 223 ff. I suggest: [ἀπο]δη(ξ)αι (= ἀποδειξαι). For ἀποδειξαι, "publish," cf. Xenophon, *Hell.* ii. 3, 11, τούτους (the laws) - - ἀεὶ ἔμελλον συγγράφειν καὶ ἀποδεικνύειν.<sup>4</sup>

## 2. THE RUINS.

The remains of Hellenistic Mycenae are scattered not only over the Acropolis, but also along the slopes of the ridges immediately adjoining it to the south-west.

### *The Acropolis.*

Apparently the walls of the citadel had been ruined after its capture by the Argives in the fifth century B.C., even if they had not suffered severely when the power of Mycenae fell at the close of the Bronze Age about the end of the twelfth century B.C. In any case the walls had to

<sup>1</sup> ii. 36, 5. No stress can be laid upon Strabo's words (p. 372) about the entire destruction of Mycenae, as they are demonstrably exaggerated, and different stories were told about the taking of Mycenae. Diodorus (xi. 65) says that it was taken by storm; Pausanias (vii. 25, 5), in a fuller account, says that the Argives could not take the old walls of Mycenae by storm, but the Mycenaeans were compelled by lack of provisions to abandon the city (cf. Pausanias, ii. 16, 5). This latter version is in better agreement with the actual state of the monuments of Mycenae (e.g. the Lion Gate) and with the mention of the temple of Athena suggested in our inscription.

<sup>2</sup> In *I.G.* iv. 498, l. 5 we should restore: [τὸν τα]ύλαγ καὶ τὸν γραφέα τὸν ἀντιτυνχάνοντας].

<sup>3</sup> Dittenb. *Syll.*<sup>3</sup> 714, 558; *G.D.I.* 4154, l. 49, 5687, l. 20; cf. Larfeld, *op. cit.*, pp. 410 ff.

<sup>4</sup> Cf. also Lysias, 184, 11; Andocides, *De Myst.* 147. Ἀποδεικνύειν occurs in the Argive decrees with the common meaning "assign," *Mnemosyne*, xlv. pp. 221, 238 (cf. Michel, 354, l. 10; *G.D.I.* 4689, l. 99).

be repaired so that the citadel could serve once again as the kernel of the Hellenistic *κώμα*. The ruined north-west corner of the great bastion guarding the Lion Gate (Pl. I. 1, ) was rounded off, a breach in the wall by the Grave Circle patched, the so-called 'polygonal tower' was erected <sup>1</sup> to block a large gap, and the extreme north-east corner of the enceinte was reconstructed. Within these walls of the Acropolis stood a considerable number of buildings, principally on the western and southern slopes. The temple of Athena was still standing on the summit,<sup>2</sup> and just below it to the west, built in the ruins of the roadway leading from the Propylon to the Western Portal of the Mycenaean Palace, was an olive press with cemented floor (Pl. II. 10). The whole slope between the West Terrace Wall of the Palace and the Citadel Wall <sup>3</sup> is covered with the ruins of Hellenistic houses, small and badly built. It is impossible in the present state of our knowledge to say whether the buildings over the South House (Fig. 22, p. 97) or the chambers at the head of the Great Ramp (Pl. I. 30-35) were private houses or not. Both contained bathrooms and were reconstructed at least once. The rather elaborate, though patchwork, bathing apparatus seems to suggest that they were not merely private houses.<sup>4</sup> The Doric capital and the column shaft found by the Lion Gate <sup>5</sup> seem to indicate the existence of a stoa or colonnaded house somewhere in the neighbourhood. In any case, though the Hellenistic occupation of the Acropolis seems to have been fairly intense, the buildings seem to have been rather mean.

### *The Lower Town.*

In Mycenaean, that is to say prehistoric, times there was no walled lower town at Mycenae. The walls, which some authorities have believed to be those of a Mycenaean lower town,<sup>6</sup> are, as Schliemann <sup>7</sup> long ago pointed out, of later date than the citadel. Doerpfeld <sup>8</sup> attributed them

<sup>1</sup> The reasons for regarding these repairs as Hellenistic are set out above, pp. 10 ff. The angle of the polygonal tower collapsed some years back and one can no longer determine whether it was drafted like that of the tower at Asine, which would determine its Hellenistic date. We have examined many old photographs, but none gives definite evidence on this point.

<sup>2</sup> Cf. above, p. 414.

<sup>3</sup> Except in the Grave Circle: Schliemann at least makes no mention of any post-Mycenaean buildings above it, and this may be significant—see above, p. 126.

<sup>4</sup> Cf. above, pp. 69 ff., 98 ff.

<sup>5</sup> Cf. above, p. 37.

<sup>6</sup> Tsountas-Manatt, *Myc. Age*, p. 33.

<sup>7</sup> *Mycenae*, p. 40.

<sup>8</sup> Tsountas-Manatt, *op. cit.*, p. xxvii.

to the same date as the Doric Temple, about the sixth century B.C. Further, following Steffen,<sup>1</sup> who called all ruins built of large blocks Cyclopean, most authorities have assumed that the wall of the lower town ran southwards past the Treasury of Atreus right to the extreme tongue of the Makry Lithari ridge, where they imagine a gate to have existed. This long and narrow extension would have added to the town an area about five hundred metres long and not fifty metres wide, which would have been useless for habitation and impossible for defence. The wall of the lower town in reality started from the south-west angle of the citadel (see Plan, Fig. 49, p. 285), ran due south-west across the little valley below the Tomb of Clytemnestra, then turned south for over a hundred metres and about a hundred-and-thirty metres north of the Treasury of Atreus climbed due west straight up the ridge. It crossed the crest of the ridge and returned north along its rocky, western side. From the north end of the ridge it swept in a wide curve towards the north-west angle of the citadel. Its line can be easily seen just to the north of the Tomb of Clytemnestra below the modern carriage road<sup>2</sup> and just to the south of the Lion Tomb. With the knowledge now at our command we need have no hesitation in declaring this wall Hellenistic.

It is a characteristic feature of the Hellenistic age that small *κῶμαι* like Mycenae, as we now know, and Asine, as Persson has shewn,<sup>3</sup> although closely connected with each other and with Argos, were strongly fortified. The continued wars between the Achaean League and the Argive tyrants, between Cleomenes of Sparta and the League, between Nabis and his enemies, and so on, indicate the stirring nature of the times in which these fortifications were constructed.<sup>4</sup> The fact that small *κῶμαι* like Mycenae were fortified makes it also easy to understand such a situation as that of the summer 195 B.C., when, though the Roman army moved quite freely around Argos, Nabis still kept his *praesidia* in Argos and the "*oppida*" in the Argive plain.<sup>5</sup>

Within the walled area of the lower town fall the principal groups of Hellenistic house ruins marked by Steffen on the northern end of the

<sup>1</sup> *Karten von Mykenai*, Pl. II.; cf. the map in Baedeker's *Greece*.

<sup>2</sup> Tsountas-Manatt, *Myc. Age*, p. 33, Fig. 7.

<sup>3</sup> *Op. cit.*, p. 41.

<sup>4</sup> See below, p. 423.

<sup>5</sup> Cf. Livy, xxxiv. 22, 4 ff. As shown by the archaeological evidence the usual translation of *κῶμη* as "an unwall'd village or country town," which is mainly derived from Herodotus and Thucydides does not always hold good.

Makry Lithari ridge. It is true that there are a few scattered Hellenistic (?) ruins outside the lower town wall towards the south end of the same ridge, but then there are many other ruins presumably of the same date in the immediate neighbourhood, by the Epano Phournos and by the Kato Phournos, by the Cyclopean bridge and by the ruined mill outside the north-east angle of the citadel. The excavations of Mycenae were unfortunately abandoned before we had time to complete our survey of this late classical town, but we believe we have identified the ruins of its Theatre and its Gymnasium in the few trials we had time to make.

### *The Theatre.*

In classical times the Tomb of Clytemnestra was obviously completely buried and invisible.<sup>1</sup> On the sloping hillside, to the south of the tholos, a theatre (Fig. 94), facing south-west, was built obliquely across the dromos, as already observed by Schliemann.<sup>2</sup> The date of the remains is clear from their character and the general arrangement: they are Hellenistic. This is clearly the Theatre of the late classical *κώμα* of Mycenae, connected with the Dionysia mentioned in our inscription and in *I.G.* iv. 497. In this Theatre the lowest row of seats consisted of a semicircle of big poros blocks (Fig. 95), of which the majority are *in situ*. The blocks which lay directly above the dromos were removed during the excavation of the tomb,<sup>3</sup> and are now to be seen just outside the dromos to the south. The poros seats are some .30 m. high, and .40 m. wide, while the slightly sloping back is .40 m. high; before the seats is a foot-rest (about .40 m. wide); all are cut out of one block. Starting from the west end of the seats we have at first five blocks, then a small flight of three steps, then two more blocks. Here the dromos intervenes, but on the other side of it the row of seats continues with seven blocks, with another flight of steps at their east end. The arrangement (beginning at the west end) would appear to have been: five seats, steps, seven seats, steps (above the dromos), seven seats (east of the dromos), steps, but so far as we were able to clear out the eastern end of the semicircle, this arrangement did not seem to be continued; complete excavation alone can give us full details. The seats on the east side of the dromos formed the greater part

<sup>1</sup> See above, p. 357.

<sup>2</sup> Tsountas and Doerpfeld also believed the ruins to be a theatre.

<sup>3</sup> Mentioned by Schliemann in his notebook.



FIG. 94.—HELLENISTIC THEATRE BUILT ABOVE THE TOMB OF CLYTEMNESTRA.  
FROM S.E.



FIG. 95.—HELLENISTIC THEATRE: FRONT ROW OF SEATS IN STONE WITH STEPS,  
ON W. SIDE OF DROMOS OF TOMB OF CLYTEMNESTRA.

of the semicircle. To the south of a line, drawn east to west across the semicircle of seats, are the remains of the foundations of the stage-building, roughly built of poros on a rubble base. The orchestra, thus, was presumably semicircular. Only one row of stone seats is preserved, obviously the seats of honour mentioned in our inscription and in *I.G.* iv. 497. The steps between the groups of seats prove that there were other seats above. But as there are no traces of any other poros seats, the upper rows of seats must have been of wood. On the slope on the east of the dromos are two blocks of stone which may perhaps have been the bases for upright timbers supporting wooden seats. The theatre deserves to be excavated completely.

### *The Gymnasium.*

On the backbone of the ridge to the north of the tombs of Aegisthus and Clytemnestra and running parallel with the south side of the modern carriage road we found in some trial trenches Hellenistic ruins which seem to have been part of a Gymnasium. Unfortunately the abandonment of the excavations prevented us from clearing any considerable part of the building so that it could be properly planned and measured. The principal remains consist of a thick wall built of large rectangular blocks of poros with a series of cement lined basins lying against its northern face. These basins were clearly meant to hold water and traces of an inlet were found at the east end. Probably the water was led along in an aqueduct from the Perseia spring, which lies above the citadel to the east. The easternmost basin is about 1.30 m. wide, the next two about 1.00 m. wide and the fourth and westernmost is more like a trough set against the face of the wall. This heavy wall with the series of basins recalls the usual arrangement of baths in *gymnasia*, as, for instance, at Eretria. The rather casual style of building as well as the finds of pottery, unsculptured *acroteria* of poros, loom weights and other miscellaneous objects, proclaim the ruins to be undoubtedly of the Hellenistic age. Near here Tsountas found the inscription relating to the shrine of Perseus,<sup>1</sup> and we found a large poros base with a socket cut in its upper side clearly intended for the reception of an inscribed stele or similar monument. If the excavations of these ruins could be systematically continued, more inscriptions might be

<sup>1</sup> *I.G.* iv. 493.

found, and in any case the plan of the building would be revealed and its identification as the Gymnasium of the Hellenistic κώμα tested.

### *Tombs.*

A Hellenistic grave was found to the south of the dromos of the Tomb of Aegisthus.<sup>1</sup> Immediately inside the wall of the lower town, to the north of the Treasury of Atreus and west of the modern road, we found another grave (No. 509) of the same type as those described below. These graves may date from the early days of the Hellenistic κώμα, before the wall of the lower town was built, or owing to the scanty population there may have been space for burials within the wall.<sup>2</sup> Outside the wall on the sloping hillside just north of the Treasury of Atreus to the east and west of the modern road we found a cemetery belonging to Hellenistic Mycenae (Fig. 49), and excavated here five other tombs (Nos. 507, 508, 510-12).<sup>3</sup> These Hellenistic tombs were shallow shafts cut in the rock or roughly built stone cists. Both cists and shafts had roofs of poros slabs and measured about .90-1.00 m. in length, about .50 in width and about .50 in depth. Owing to their shortness the legs of the dead were doubled up. Some of the tombs (*e.g.* Nos. 508, 509) were used twice, the second interment being simply put above the other.<sup>4</sup> The finds in the tombs were very poor. In Tomb 507 an amphora and a small pot of common black Hellenistic fabric stood above the roof at the north end. In Tomb 508 a hydria of common Hellenistic type lay by the skull in the lower interment; in Tomb 509 a small two-handled jar and two 'tear-bottles' were found.<sup>5</sup> In the Tomb 507 was an iron ring, and in both interments in Tomb 509 below the chin iron pins were found. These pins had a disc on the top with a heavy bulb below and probably were used for fastening the garment. They may be considered a Hellenistic development from the well-known bronze pins of earlier times.<sup>6</sup>

<sup>1</sup> See above, p. 298.

<sup>2</sup> Cf. Plutarch, *Lycurgus*, 27; *B.S.A.* xiii. p. 155.

<sup>3</sup> We excavated also two small shallow shaft graves (about 1.00 m. by .50 m.) cut in the rock: Tomb 501 near the L.H. III. Chamber Tomb 502, and Tomb 506 in the area north of the Treasury of Atreus. As nothing was found in either, it is impossible to suggest any date for them. To the south of the Tomb 502 a shaft grave, No. 503 (1.50 m. by .40 m.), cut in the rock with a roof of stone slabs was excavated. It also contained nothing except a much-decayed skeleton facing east, so its date cannot be determined.

<sup>4</sup> Cf. the Hellenistic tombs at Sparta, *B.S.A.* xiii. pp. 157 ff.

<sup>5</sup> Cf. *B.S.A.* xiii. p. 162; Keramopoulos, *Ἀρχ. Δελτ.* iii., Fig. 169 (7, 8).

<sup>6</sup> *B.S.A.* xiii. p. 110, Fig. 1.



## 3. ITS HISTORY.

*Destruction.*

Mycenae was in its early days a free city with independent policy. It followed the leadership of Sparta, and, in contrast to Argos, appears in the roll of honour of the cities which took part in the Persian war—at Plataea the men of Mycenae opposed the Bactrian soldiers of Mardonios. But during the domestic troubles of Sparta after 470 B.C. Argos got the opportunity of crushing this Spartan *point d'appui* in the northern angle of the Argive plain. Pausanias,<sup>1</sup> Strabo<sup>2</sup> and Diodoros<sup>3</sup> relate the catastrophe at Mycenae. The old Mycenaean walls, we are told, made a good stronghold, but finally the town was taken and the inhabitants expelled. Pausanias and Strabo vie with one another in describing the complete destruction of old Mycenae, which they bring into dramatic relief against its glorious past. 'Mycenae is no more; there is no trace of it,' asserts Strabo; Pausanias nearly 200 years later contrasts the desertion of Mycenae with Thebes, where there were at least a few habitants living on the Acropolis. Diodorus ends his description of the sack of Mycenae with these words: *καὶ διέμεινεν ἀοίκητος μέχρι τῶν καθ' ἡμᾶς χρόνων*. And in fact, finds proving habitation between the time of its destruction and the third century B.C. are entirely lacking. This has been already stated by Schliemann and Tsountas,<sup>4</sup> and the recent excavations confirm it. The shrine of Athena on the top of the Acropolis might still have been left as we have assumed; and the Heroön of Perseus on the left side of the road from Mycenae to Argos was obviously also revered by the peasants of the neighbourhood—we know of the cult of Perseus from a fifth-century inscription<sup>5</sup> and from Pausanias.<sup>6</sup> Otherwise the spot was certainly uninhabited, though shepherds and others may, of course, have dwelt in the neighbourhood of the famous spring of Mycenae—*γαλακτοπόται ἄνδρες Μυκηναῖοι ὀρεῖσθαι*, in the words of Euripides.<sup>7</sup>

*Revival.*

In the third century B.C. a change took place. The Argive δᾶμος founded a κώμα round the shrine of Athena. This is perfectly clear from

<sup>1</sup> ii. 16, 5; v. 23, 3; vii. 25, 5, 6; viii. 27, 1; viii. 33, 2.

<sup>2</sup> C. 372, 377.

<sup>3</sup> xi. 65; cf. *Anth. Pal.* ix. 101.

<sup>4</sup> 'Εφ. 'Αρχ. 1887, p. 159, where references to Schliemann will also be found. Cf. Aristotle, *Meteorologia*, i. 14.

<sup>5</sup> I.G. iv. 493; see above, p. 420.

<sup>6</sup> ii. 18, 1, ἔχει (Perseus) δὴ καὶ ἐνταῦθα τιμὰς παρὰ τῶν προσχωρίων.

<sup>7</sup> *Electra*, 170.

the inscriptions and from the Hellenistic finds of Schliemann and Tsountas. Our incomplete survey of the Hellenistic ruins during the recent excavations has thrown fresh light on this small fortified Argive κῶμα of the later centuries before Christ.<sup>1</sup>

The first reference to it falls in 235 B.C., when the Argive tyrant Aristippos was killed here as he fled towards Argos after an unsuccessful assault on Kleonai.<sup>2</sup> This was an episode in the struggle between the Argive tyrants of the third century and the Achaean League, which went on until 229 B.C. At that time the boundary between the possessions of these two enemies (*i.e.* Achaia-Sikyonia-Corinthia and Argos) fluctuated between Kleonai and Mycenae. Occasionally the Achaeans mastered all the country down to the very walls of Argos.<sup>3</sup> Ancient fortifications, rather casually built, but obviously directed against an enemy coming from the north, exist on Mount Hagios Elias,<sup>4</sup> which overlooks Mycenae from the north.

Walls of this kind actually suggest a situation like the war between the Achaeans and the Argive tyrants; at that time fortification lines, such as the Hagios Elias walls, may have been built on many of the mountains north of Mycenae, and the Hagios Elias walls themselves may actually date from this war. No mention is made of Mycenae in our accounts of the war with Cleomenes, but naturally the armies of Cleomenes passed it both on their way to Corinth and in the king's final retreat. In the spring of the year 195 B.C. Flamininus marched from Kleonai towards Argos. Once more in its history—as in the Homeric Catalogue of Ships, and many times afterwards—there was a division between Argeia and Corinth with Achaia.

#### *Nabis and Flamininus.*

In 198 B.C. the Achaeans had taken the side of Rome against Philip V of Macedon,<sup>5</sup> but Argos or 'two or three' leading Argives, in the words of the forgiving Flamininus according to Livy, had chosen to side with Philip, and in the year 198-7 the king, entirely against the will of the Argives, handed the town over to the Spartan tyrant Nabis.<sup>6</sup> Mycenae shared the fate of Argos.<sup>7</sup>

<sup>1</sup> See the general remarks on the Hellenistic strata on pp. 10, 36 ff., 38 ff., 68 ff., 96 ff.

<sup>2</sup> Plutarch, *Aratus*, 29.

<sup>3</sup> Plutarch, *op. cit.*, 27.

<sup>4</sup> See below, pp. 429 ff., and *Frontispiece*.

<sup>5</sup> Livy, xxxii. 25.

<sup>6</sup> Livy, xxxiv. 32.

<sup>7</sup> *I.G.* iv. 497.

In spite of the gift of Argos, Nabis still kept up communications with the Romans, and we are told by Livy that in the year 197 B.C. there was a meeting between Nabis and Flamininus in the neighbourhood of Mycenae. The northern frontier of Nabis at that time was obviously in this region and Mycenae may have been one of his northernmost points. He was left in possession of Argeia for the moment.<sup>1</sup> After the battle of Kynoskephalai, action for the liberty of the Argives began.

Finally, in 195 B.C. Flamininus came to the Peloponnese to liberate the Argeia. At the beginning of the harvest-time, in May, his army was outside the walls of Argos. Possibly Mycenae, being close to the road from the north, was liberated at that time. In any case Argos and a good deal of Argeia was still commanded all the summer by Nabis.<sup>2</sup> Flamininus passed on to Sparta, and Argos was not liberated from the Spartan garrison until the end of the autumn. Livy<sup>3</sup> tells us that once during this summer two thousand Argives were forced to go to Sparta.

It is to this period in the history of the Argive plain that *I.G.* iv. 497 and the decree published above belong. The former tells us that during the domination of Nabis (between 198-7 and May or autumn 195) the ephebes of Mycenae were carried off to Sparta, probably with other contingents like those of the summer of 195. Protimos of Gortyn, on whom the decree bestowed *proedria*, took care of them in Sparta, and did everything he could to protect them. Probably this decree was issued after the peace with Nabis in the autumn of 195 B.C. During the celebrations of the delayed Nemea that autumn, as Livy explicitly states,<sup>4</sup> Argive citizens who had been compelled to go to Sparta during the summer of 195 and in the other years of the tyranny of Nabis could return. No doubt the Mycenaean ephebes mentioned in *I.G.* iv. 497 were among these returning Argives. Thus Panamos (June-July) 194 B.C. seems to be the most probable date for *I.G.* iv. 497.

In our decree Damokleidas of Sparta is honoured and the partnership in the festivals is restored to the Lacedaemonians. The close affinity between our decree and *I.G.* iv. 497 has already been pointed out. We have to find a situation about 200 B.C. to fit this decree in honour of a Lacedae-

<sup>1</sup> Livy, xxxii. 39 ff.

<sup>2</sup> Livy, xxxiv. 22, 4-42. *Id.* xxxiv. 35 tells us that Flamininus demanded in the autumn: *ut ex ea die intra decimum diem ab Argis ceterisque oppidis, quae in Argivorum agro essent, praesidia omnia deducerentur*, etc.

<sup>3</sup> xxxiv. 29.

<sup>4</sup> Livy, xxxiv. 41.

monian. In the struggles after the war with Cleomenes, Argos was altogether anti-Spartan. The Spartan tyrants Machanidas and Nabis were both enemies of Argos. The situation changed fundamentally in 198-7, when Argos broke with the Achaeans and sided with Philip, who was trying to win Nabis over to his side. We know, however, that on this point the citizens of Argos by no means shared the sympathy of their ally. The king offered Argos to Nabis; the tyrant wished for a decree of the Argive assembly in his favour, but the Argives shewed clearly that they hated and despised him.<sup>1</sup> From the war against Cleomenes up to this event there is hardly any probable date for our decree, and the time of the tyranny of Nabis after 198-7 also seems unlikely, though of course not altogether impossible. Argeia and Sparta were united from 198-7 to 195, but the Argives were obviously by no means pro-Spartan. The detention of the Argives against their will in ignominious slavery underlies most of the orations concerning this affair in the xxxivth book of Livy. Consequently the time after the peace with Nabis in the autumn of 195 B.C. seems to provide the first situation suitable to our pro-Spartan decree. Damokleidas, who is honoured in our inscription, probably befriended the young Mycenaeans during their compulsory stay at Sparta, or helped Argos in some other way during the tyranny of Nabis. The only objection to this conclusion would be that the peace of the year 195 still left Nabis in possession of Sparta. This was generally criticised, according to Livy: '*id minime conveniens liberanti Graeciam videbatur, tyrannum reliquisse . . . omnibus circa civitatibus metuendum*,' etc. Flamininus, however, in his famous speech at Corinth at the very beginning of 194 gave various reasons for his policy towards Nabis. He expounded his wishes and principles at length, exhorting the Greeks to peace and concord. His speech, according to Livy, deeply impressed the Greeks.<sup>2</sup> The Mycenaean Haliaia which conferred the honours on Damokleidas and—according to our restoration—renewed the festival agreement with the Lacedaemonians, met in the spring month Arneios. Our decree may thus well date from the spring of 194 B.C., and be a consequence of the pacific Roman policy of the years 195 and 194. It seems strikingly to suit the

<sup>1</sup> Livy, xxxii, 38.

<sup>2</sup> xxxiv. 48 ff. . . . *has velut parentis voces cum audirent, manare omnibus gaudio lacrimae, adeo ut ipsum quoque confunderent dicentem. Paulisper fremitus approbantium dicta fuit, monentiumque aliorum alios, ut eas voces, velut oraculo missas, in pectora animosque demitterent.*

situation immediately after the great Corinthian speech of Flaminius. After the year 193 B.C., on the other hand, Nabïs again opened hostilities with the Achaeans, and Argos of course supported the League against her old enemy. In view, therefore, of these later events also, I think it safe to suggest that Arneios of the year 194 was the date of our inscription, while *I. G.* iv. 497 may be about three months later.

#### *Government.*

Thus according to our view the new Mycenaean decree and *I. G.* iv. 497 both concern the peace of the year 195 B.C. In any case they date from about 195, and give valuable information about the government of an Argive *κῶμα* like Mycenae at that period, and about its relations to Argos. In this respect they are supplemented by the somewhat later inscription, *I. G.* iv. 498, which gives instructions for the investment of money, presented by a certain Damochartas.<sup>1</sup> The Argive *δᾶμος*, of which the Hellenistic Mycenaean were a part, met for its general assemblies in the town of Argos—probably, in the Hellenistic Age as in early days, on the south-east hillside of Larissa.<sup>2</sup> The citizens lived in the town itself, or, like the Mycenaean, in villages (*κῶμαι*)<sup>3</sup> on the Argive plain. Other examples of such *κῶμαι* besides Mycenae were, for instance, Asine, Prosymna and Arachna. In the Argive third-century decrees, names of these *κῶμαι*, usually in the nominative, are added to the names of some citizens, shewing that these citizens were villagers, who took part in the general assembly in the town—for instance, *Τιμοκλῆς Φολυγάδας Πρόσυμνα*. The Argives from all over the plain could naturally join in the general assemblies of Argos.<sup>4</sup>

There was no official division of the members of the Argive assembly by *κῶμαι*. Officially all the citizens were divided into phylai, phatrai and pentecostyes.<sup>5</sup> The Argive phylai were the *Τρῳάθιοι*, and the three Doric phylai, the *Δυμᾶνες*, *Ἄλλεῖς*, *Πάμφυλοι*. As to the phatrai and pentecostyes, there occur in Argive inscriptions from the fifth century, as

<sup>1</sup> Cf. Dareste, Haussoullier, Reinach, *Recueil des inscriptions juridiques grecques*, ii. 1, p. 143.

<sup>2</sup> Cf. *Strena Philologica Upsaliensis*, 1922, pp. 271 ff.

<sup>3</sup> Cf. our inscription l. 15; *I. G.* iv. 497, l. 11 (*κωμέται*), 498 l. 2.

<sup>4</sup> Cf. *Mnemosyne*, xlv. pp. 53, 59, 221, 230, 232, and the list given by Schwyzzer, *op. cit.*, p. 46.

<sup>5</sup> Cf. the inscription in *Mnemosyne*, xlv. p. 65; Schwyzzer, *op. cit.*, No. 90: ἀ[γ]γράφαι (a new citizen) ἐ[ν] φυλὰν καὶ φάτραν καὶ πεντηκοστήν.

well as in decrees and other inscriptions of the Hellenistic age, certain proper names, such as : Αἰθαλεύς, Δαῖφοντεύς, Λυκοφρονίδας, Τημενίδας, Ἀμφιαρητείδας, and so on.<sup>1</sup> As Vollgraff says, these were probably names of phatrai.

As it happens, the Argive decrees so far known contain no names of Argive citizens living in Mycenae. On the other hand, our Mycenaean decrees give Mycenaean names with their full names and attributes as Argive citizens. The Mycenaean names known from our decrees are :

Δελφίων [Τι]μοκρίτου Δαῖφοντεύς (*I.G.* iv. 497)  
 - - - ς Ἀριστέος Δαῖφοντεύς Μυκᾶνα[ι] (*I.G.* iv. 498).  
 - - - ς Ἀγ[ι]έος

Μυκᾶναι and the Μυκανέες as part of the Argive land and the Argive δᾶμος are precisely illustrated by these names : Μυκᾶναι is the κῶμα ; Δαῖφοντεές, known also from an Argive inscription (*I.G.* iv. 529), was the φάτρα of our two Mycenaean names—the whole is in full agreement with the names occurring in the Argive decrees, e.g. Λαχάρης Μίθωνος Μελανιππίδα[ς] Ὑσέα ἄν[ω].<sup>2</sup> The eponymous hero of the phatra, Daiphontes, was king of Argos, and is mainly known as the husband of Hyrnatho, daughter of Temenos and εφονυτος of the Argive phyla Ὑρνάθιοι.<sup>3</sup>

The local self-government of the κῶμα is as clearly illustrated as the Argive citizenship of the Mycenaean. Our decrees shew very well how the Argive citizens living on the plain were free to arrange the special matters of their κῶμαι as they liked. The village of Mycenae had its own assembly (ἀλιαία), which, as has been stated above, met on the second day of each month. It further had a council (the δαμοργοί) and (corresponding to the Argive ἀρήτευε βωλᾶς<sup>4</sup> or the Attic ἐπεστάτει) the officiating president of the δαμοργοί is mentioned in the decrees of the Mycenaean ἀλιαία.<sup>5</sup> *I.G.* iv. 498 gives us a glimpse into the finances of Hellenistic Mycenae, and shows how the Mycenaean κωμέται could

<sup>1</sup> Dittenb. *Syll.*<sup>3</sup> 56, l. 45; *I.G.* iv. 553. Vollgraff gives a list in *Mnemiosyne*, xlv. pp. 56 ff.; cf. Schwyzler, *op. cit.*, p. 44.

<sup>2</sup> *Mnemiosyne*, xliii. p. 373. *I.G.* iv. 498 reads Μυκανα[ίος], but that is impossible, as Μυκανεύς is the regular form of the Mycenaean decrees; cf. our decree, ll. 3, 7; *I.G.* iv. 497, ll. 3, 7. Μυκᾶναι, the name of the κῶμα in the nominative, is exactly what is required according to the Argive evidence.

<sup>3</sup> Cf. *B.C.H.* xxxiii. 1909, p. 191; *F.H.G.* iii. 376, 38.

<sup>4</sup> *Mnemiosyne*, xliii. pp. 366 ff.; xlv. p. 221. Dittenb. *Syll.*<sup>3</sup> 56.

<sup>5</sup> Cf. *I.G.* iv. 497.

decree that capital belonging to the village—in this case 500 drachmai—should be invested in loans on interest. For current business a *ταμίης* and a *γροφεύς* under the superintendence of the *δαμοργοί* are mentioned. Further, this small Hellenistic commonwealth owns the shrine of Athena, where decrees could be published, and the local Dionysia gave the village an opportunity to shew some current forms of diplomatic courtesy.

### *Desertion.*

Finally, the picture of this flourishing Hellenistic village must be contrasted with the words about Mycenae quoted above from Diodoros, Strabo and Pausanias. As to Diodoros and Strabo, the Hellenistic finds as well as the actual remains from the Mycenaean Age entirely disprove their statements, which are obviously exaggerated and rhetorical. With Pausanias<sup>1</sup> the case is different. He described Mycenae in the imperial age carefully and in detail. Probably the shrine of Athena no longer existed in the second century A.D., as Pausanias does not mention it; here a conclusion *a silentio* seems unavoidable. Nor can we contradict his explicit statement that Mycenae was desolate in his day, and that no inhabitants lived on its Acropolis.<sup>2</sup> There was at best perhaps a thin and scattered population at Mycenae, so that the place had an impression of loneliness and desolation. This assumption, however, though partly against Pausanias, seems necessary, because of finds of the Imperial age,<sup>3</sup> which, though by no means important, do occur in Mycenae. Anyhow it is clear—and also natural—that the general depopulation in the Roman age took effect on Mycenae, which was a village of barren slopes and stony fields above the rich and fertile Argive plain.

C. A. BOETHIUS.

<sup>1</sup> ii. 16, 5.

<sup>2</sup> v. 23, 3; viii. 33, 2. Cf. 'Εφ. 'Αρχ. 1887, p. 160, and the description of Asine, ii. 36, 5.

<sup>3</sup> We have a fragment of a grave stele of the Roman age from Mycenae (see above, p. 11), and cist graves of the same date are to be found on the Kalkani hill: one such was, in fact, found in the dromos of Tomb 531 and will be described with that tomb.

## EXCAVATIONS AT MYCENAE.

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### § XII.—HAGIOS ELIAS.

(FRONTISPIECE AND PLATE LXII.)

The citadel of Mycenae owes much of its impressiveness to the fact that it lies at the foot of and between the twin heights of Hagios Elias to the north and Zara to the south. These two bare peaks of limestone rise very steeply, and seem to stand like two sentinels specially posted by nature to add to the dignity of Mycenae.<sup>1</sup> Their mountain wildness is in strong contrast to the smiling fertility of the Argive plain, which stretches away to the south-west. Zara is some 659 m. high, and has no remains of antiquity on its summit. Hagios Elias is higher, some 807 m., and has been known, since the days of Schliemann, to be crowned by the ruins of ancient fortifications.

We made an expedition to the summit on the evening of June 18th, 1922, camped for the night there, and spent the next day in planning the walls and making trial excavations within them.<sup>2</sup> The view from the summit is magnificent (Fig. 96). To the south the whole of the Argive plain lies at one's feet; Argos itself, Lerna, Tiryns, Mideia, Nauplia and Asine are all visible. Berbati and the Kontoporeia<sup>3</sup> are commanded from this height, and Arachnaion stands out clear to the east. To the north the roads to Stephani and Hagios Vasileios (Kleonai) are visible, and the route to Corinth by Nemea can be traced. The Acrocorinth itself can be seen with the peak of Geraneia beyond. When at night we watched the beams of the lighthouse at the western foot of Geraneia revolving over the Gulf of Corinth, we wondered how many years ago Clytemnestra's watchmen had suddenly seen the red glare leap out on

<sup>1</sup> See *Frontispiece*.

<sup>2</sup> In this we were helped by Rear-Admiral Wardle of the British Naval Mission to Greece, whose experience was of great help in the surveying.

<sup>3</sup> Steffen, *Karten v. Mykenai*, pp. 43 ff.



its summit to tell them the tale of Troy was over, and then themselves lit the beacon to rouse the burghers of Mycenae below. Westwards Trikaranon, Apaisas and the heights above Phlious and Nemea could be seen guarding the passes to Stymphalia, and further south one could survey the upper valley of the Inachos and the route to Arcadia. The peak of Hagios Elias is so high, so precipitous and so isolated, that

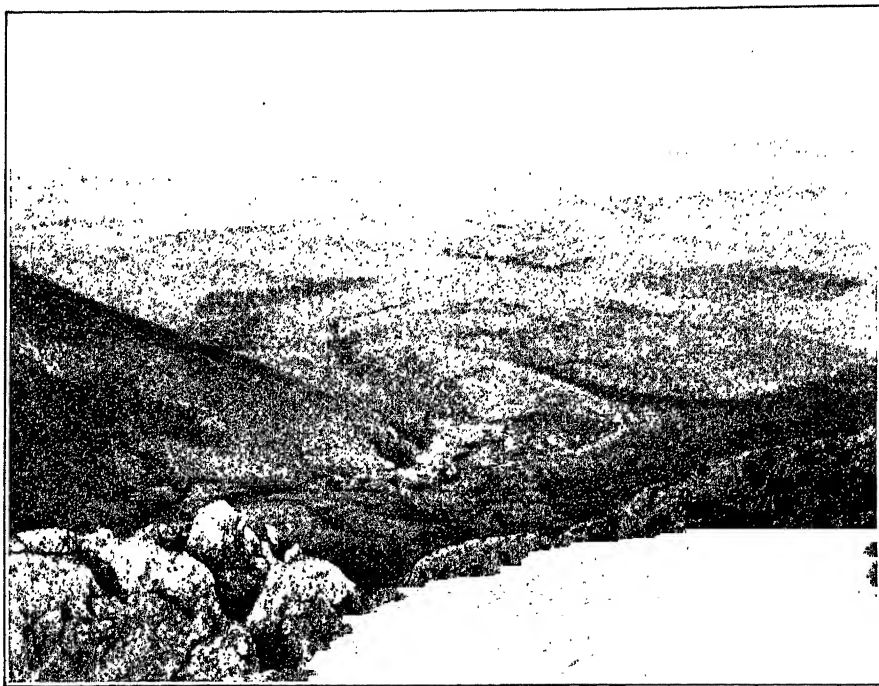


FIG. 96.—HAGIOS ELIAS: VIEW OF MYCENAE AND ARGIVE PLAIN FROM SUMMIT AT DAWN. ARCADIAN HILLS IN BACKGROUND.

it makes an ideal watch or signal station, since there are no subordinate heights near to mask its outlook, and, as suggested by Steffen, since Arachnaion is not visible from Mycenae itself, may well have been the last in the chain of fire signals which, as told by Aeschylus,<sup>1</sup> announced the fall of Troy to Clytemnestra.

Schliemann<sup>2</sup> has left a fairly full account of the walls and pottery he discovered here. On the summit he found the ruins of the Cyclopean

<sup>1</sup> *Agamemnon*, v. 281 ff.

<sup>2</sup> *Mycenae*, pp. 145 ff.; Notebook, November 6th, 1876.

walls of a small fort within which was a roofless chapel of Hagios Elias with a tree growing inside it and visible from the plain below. The entrance was on the east and led to a short passage, and in the threshold the lower pivot-hole was still visible. The walls were just over four feet thick and three to six-and-a-half feet high. Lower down on the three accessible sides he found other Cyclopean walls standing to a height of ten feet, five feet thick, and as much as two hundred-and-sixty-six feet long. 'From between the stones of all these walls,' he says, 'I have been able to collect a large number of fragments of handsome light green vases with black ornaments, which I consider as old as the walls of Tiryns and Mycenae.' By this he presumably meant he found matt-painted (M.H.) pottery in these walls. He came to the conclusion, from the mountain being so high and steep, from the lack of water, and from the small and rock-encumbered summit, that it could never have served as a fortress. He inclined to the opinion that there had existed here as a predecessor to the chapel of Hagios Elias a small temple of great sanctity and immense importance, perhaps dedicated to the Sun God.

Steffen <sup>1</sup> saw the same walls and describes them in much the same way. He says the kernel of the fortifications on the top was a small enceinte in good condition except for some damage on the south side. The entrance was from the east just to the north of the roofless chapel in which the tree grew. On the shieldless right side of anyone entering was a rectangular bastion projecting from the wall. Below to the north-east he noted a piece of Cyclopean wall very well built with large undressed blocks carefully fitted together like the best portions of the Cyclopean walls of Mycenae itself. This wall, like a corresponding one to the west, was intended to make it difficult for any who attacked this little fort to approach the foot of the actual defences. He rightly says that in most places the hillside is so steep that it would be difficult, if not impossible, to fight one's way up against an active defence. Below the summit to the north-east he found another system of walls covering a distance of some 220 m., not continuous, but built where breaks in the precipitous slopes would permit access. He also found near these walls the ruins of small huts roughly built of loose stones. Similar huts exist on a small spur to the west as well. He calls special attention to a

<sup>1</sup> *Op. cit.*, pp. 19 ff.

small door in one of the lower north-eastern walls which he thinks was intended to lead down to the Mathi spring lying at the north foot of the mountain, where there are ruined fortifications. The complete absence of water or indeed of any cistern on the summit would make it very necessary for any troops stationed here to have ready access to water. By this gate, as Steffen points out, the Mathi spring could be reached. Otherwise they would have to descend to the south to the

Chapel on Summit.

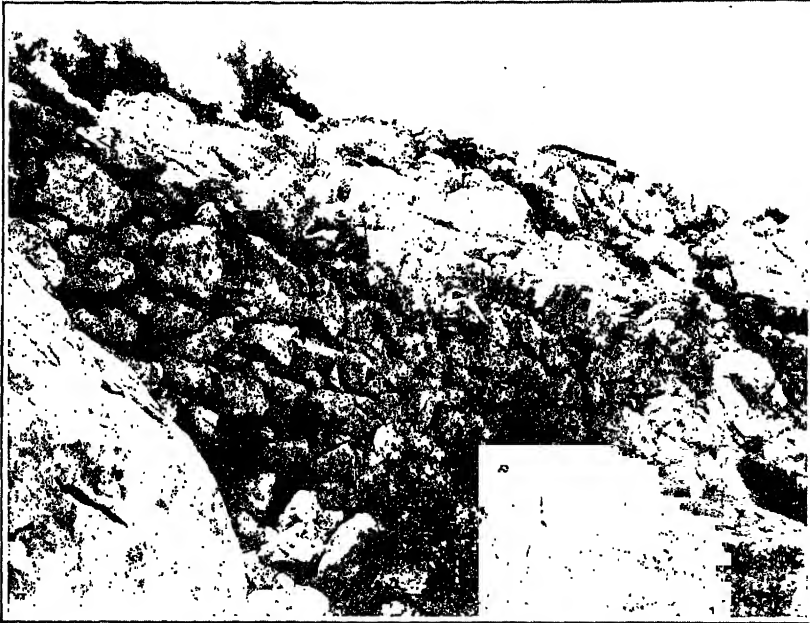


FIG. 97.—HAGIOS ELIAS: MYCENAEAN WALL JUST BELOW SUMMIT TO N.E.

Perseia spring just above Mycenae or another small spring somewhat nearer the foot of the mountain. Steffen thought that the walls here were those of a look-out and signal station, the most important observation post of Mycenae, and he also quotes very appropriately the passage in the *Agamemnon* referred to above.

The sketch-plan in Pl. III. shows the small fort on the summit described by Steffen. The roofless chapel of Hagios Elias, where the tree grows, has been pulled down, and a new chapel built further north on the highest point. The entrance on the east side with a threshold

and pivot-hole, seen by Schliemann and Steffen, we could not find. It may have been destroyed when the new chapel was built and presumably must have existed in the angle between the tree and the projecting bastion. The southern wall has clearly suffered much and been much rebuilt, and the entrance with two steps here is obviously modern. All the walls have been repaired in modern times, but the foundations in almost every case seem ancient.

The rock within the walls everywhere shews on the surface, but there are pockets of soft black earth in hollows here and there. In these we excavated and found a good deal of nondescript pottery, including mediaeval and modern fragments. There were, however, three Mycenaean kylix stems, part of a kylix handle, the handle and base of a deep bowl, all L.H. III. in date. There were about twenty pieces of inferior black glazed Hellenic pottery. Miscellaneous finds included a late Roman and a Frankish coin. There seems little doubt that the walls in origin go back to L.H. III. times, but were probably repaired in the classical period; they certainly have been restored quite recently. Below this small fort, and to the north-west, is a long stretch of wall, which, as suggested by Steffen, seems to have been built to impede access to the fort from this side. It may be Mycenaean. The other wall below the fort to the north-east is, as Steffen rightly said, a splendid specimen of Mycenaean masonry (Fig. 97). It stands about two metres high and is over a metre thick, but as it is a terrace wall well packed in with large stones behind, it has no real thickness. Its object must have been to provide an outer defence at this point, and prevent any sudden attack from the north-east.

Lower down to the north-east, on a rough saddle between the summit and the next (lower) peak to the east, run two lines which abut against the rocks at either end (Fig. 98). These walls do not appear to be Mycenaean, and are therefore probably not earlier than classical times. Steffen seems to have indicated their purpose rightly in suggesting that they were to cover the north-east flank of the position, and overlook the path to the Mathi spring below to the north. In the upper of these two walls, which are so thickly grown round with ilex scrub that observations and measurements are not easy, is a small doorway 1.40 m. wide on the outside and about 2 m. wide on the inside. This and the other wall as well, are both terrace walls, and except by the doorway nowhere

have two clear faces. The upper wall has two faces for 8 m. west and 3 m. east of the doorway, and here it is about 1.50 to 2.00 m. thick. In these walls, never over 2 m. high, we found some pieces of late Greek tiles which seem to be a sufficient indication of date. But nowhere either in these walls or in those on the top did we find any pieces of the matt-painted pottery which, according to Schliemann, was so common here. Just a little to the south-east of these walls against the side of a rocky peak are the much-ruined remains of small huts built very roughly of packed blocks of the native limestone. These from their appearance should be either mediaeval or else comparatively modern. They are certainly neither Mycenaean nor classical.

We cannot pretend that our exploration of the ruins on this mountain is final. Others will no doubt make fresh discoveries, and be thus enabled to correct us in many details. All that we found goes to confirm the opinion of Steffen that here on this steep and waterless limestone peak the lords of Mycenae maintained in L.H. III. times a small fort and look-out station to announce to them by fire or other signals any stirring news—the sudden approach of an enemy, or the fall of Troy.

A. J. B. WACE.

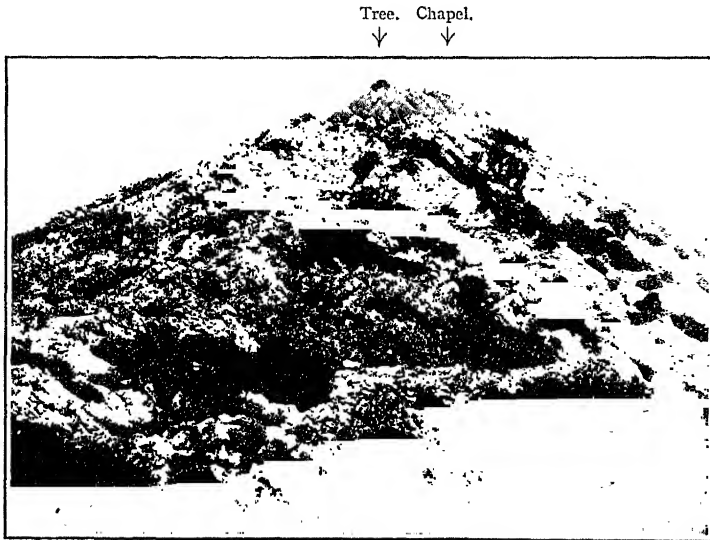


FIG. 98.—HAGIOS ELIAS: HELLENIC WALL ON SHOULDER BELOW SUMMIT TO N.E.



## ANNUAL MEETING OF SUBSCRIBERS.

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The Annual Meeting of Subscribers to the School was held in the Rooms of the Society of Antiquaries, Burlington House, on Tuesday, October 31st, 1922, Sir ARTHUR EVANS in the Chair.

The Chairman of the Managing Committee Mr. GEORGE A. MACMILLAN, having announced that owing to illness the Director was unable to give his lecture on the excavations of the school at Mycenae,<sup>1</sup> and that under these circumstances Sir ARTHUR EVANS had kindly offered to describe his latest discoveries at Knossos, presented the following Report for the Session 1921-1922:—

A most satisfactory feature of the past session has been the marked increase in the number of foreign students who have applied for admission to the School. This increase, which is mainly due to the energy and reputation of the Director, is conclusive evidence of the high position the School now holds in the foreign archaeological world.

It is a matter of regret that a corresponding increase in the support given to the School at home cannot be recorded.

The excavations at Mycenae have been most successful, and the number and importance of the finds will necessitate a short campaign next spring. The work of the School for the ensuing session will therefore probably consist in completing the excavations at Mycenae and in prospecting for a new site for excavation, which, in the opinion of the Committee, should belong to the Classical period.

The Committee have to report a most generous offer to the School on the part of Sir Arthur Evans, who proposes, subject to the consent of the Greek Government, to transfer to the School his property at Knossos, including the Villa Ariadne, the site of the palace of Minos and some adjacent land at present mostly under vines. He has also offered to make such financial arrangements as should, with the rent derived from the vineyards, cover all expense of upkeep.

<sup>1</sup> At a special meeting held on December 5th the Director gave his postponed lecture.

The Committee have most gratefully accepted this offer and have already secured the assent of the necessary Greek authorities to the principle of the proposed gift. A few questions in connexion with the tenure of the property remain to be settled before the deeds of transfer can be signed.

The *Annual*, which has been unavoidably delayed in the press, will soon be in the hands of subscribers, and with its publication the School will have resumed its full activities. The first part of the final publication of the excavations at Palaikastro will be issued with the new *Annual* in the form of a supplement.

It may be necessary to remind subscribers that the *Annual* is no longer issued free except to yearly subscribers of £2 or more, and to donors of £20 or more to the general funds of the School. Subscribers of £1 and donors of £10 can purchase the *Annual* at the reduced rate of £1. The price of the new volume, including the Supplement, to non-subscribers will be not less than three guineas.

By the death of Sir John Sandys the School has lost a lifelong friend and sage counsellor. He was a member of the original Committee of the School, and for many years acted as Cambridge representative until, in the summer of 1921, he was compelled to resign owing to ill-health. His influence and unfailing zeal were constantly active to engage the support and interest of the University in the work of the School and the progress of its students. Only those who worked with him on the Committee can fully appreciate the minute care he bestowed on all that concerned the interests of the School. Mr. F. E. Adcock, of King's College, Cambridge, has been appointed to succeed him as Cambridge representative on the Committee.

**Changes in Personnel.**—Mr. S. Casson, who since the war has been acting as Assistant-Director and Librarian, resigned at the end of the Session. The Committee desire to thank Mr. Casson for his valuable work on behalf of the School during a very difficult period, and wish him every success in his new appointment as University Lecturer in Classical Archaeology at Oxford. In addition to his work at Athens in the Hostel and Library, Mr. Casson has done much to preserve archaeological finds in Macedonia from the ravages of war.

To succeed Mr. Casson the Committee have been fortunate in securing Mr. A. M. Woodward. Mr. Woodward is an old student of the School who took part in the excavations at Sparta, and for the Session of 1909-1910 acted as Assistant-Director. From December 1915 to January 1919 he served with the British Salonika Force, first as Officer Interpreter with the Claims Commission, and subsequently as Intelligence Officer. He has been on the staff of the University of Leeds since 1912, latterly as Reader in Ancient History and Classical Archaeology, and has conducted excavations in con-



nexion with the Yorks Archaeological Society at the Roman forts of Slack and Ilkley.

In the summer of 1923, when Mr. Wace's long and successful directorship comes to an end, Mr. Woodward will become Director.

**Director.**—At the beginning of the session the Director, Mr. A. J. B. Wace, was already in residence and has since been continually in Greece. During the session he gave the usual course of lectures on the Monuments and Museums of Athens for students and subscribers to the School and for other interested persons. These lectures were very well attended and proved of great value in stimulating interest in the School. In conjunction with Dr. Blegen, Assistant-Director of the American School, he also gave a special course of lectures on the Prehistoric Period for members of the various archaeological schools. Part of this course was held at Corinth.

A large part of the Director's time has been spent in preparing the final publication of the School's excavation at Mycenae, a work which involved several journeys to Mycenae, Tiryns and Nauplia during the autumn and winter. In March he spent three weeks working in the Museum at Nauplia with Professor Droop and Mr. Hutchinson. He also, in company with Dr. Blegen and Mr. Hutchinson, examined the prehistoric site at Lerna.

On May 13th he left Athens to take charge of the School excavations at Mycenae, and remained there until August 15th.

The increasing importance of the School has meant more calls on the Director's time, and he was consequently unable to accept the invitations of Sir Arthur Evans to Knossos, of Mr. Freshfield to Smyrna, and of the French School to follow their excavations at Mallia in Crete. He managed, however, at the special request of Professor Persson, to pay a short visit to the Swedish excavations at Asine; he also made a brief excursion to Thebes to see Dr. Keramopoullos' excavations.

**Assistant-Director and Librarian.**—Mr. Casson arrived in Athens on January 9th and left for England early in July. For about six weeks of this time he was in Macedonia, where he finished his excavations of an Early Iron Age cemetery at Chauchitsa near Doiran. He also made short excursions to Chalcis, Eretria, Delphi, Mycenae and the Argive Heraeum. The rest of his time was spent in managing the Library and Hostel, and in acting for the Director during his absence at Mycenae.

**Students.**—Mrs. Smith, wife of Dr. E. Smith, died shortly after her arrival in Athens. The Committee desire to express their sympathy with Dr. Smith on his loss.

Miss W. Lamb and Miss H. L. Lorimer both came out to take part in the

excavations at Mycenae; Miss Lamb also finished her section of the Mycenae report, which is now in the press, and Miss Lorimer made a long journey in the Peloponnese in order to examine Homeric sites.

Of the men students among senior members of the school were Professors Droop and Ure and Mr. J. D. Beazley. Professor Droop went to Myconos to study the Rheneia pottery; Professor Ure, who was accompanied by his wife, continued his work at Rhitsona; and Mr. Beazley examined red-figured vases in the Museums at Athens, Eleusis and Myconos.

Messrs. B. Ashmole and H. T. Wade-Gery, who were readmitted as students, were unfortunately only able to come out for short visits.

Mr. A. W. Lawrence, who was also readmitted, made a study of Hellenistic sculpture and helped Mr. Casson at his excavation at Chauchitsa.

Of the three first-year students, Mr. Hutchinson studied "orientalizing" pottery, Mr. W. A. Heurtley devoted himself to the topography of Boeotia and to prehistoric archaeology, and Mr. J. E. Scott travelled widely to study the geography and topography of Greece.

The following were admitted as foreign students:—

Dr. Boethius, who again gave valuable help at the excavations at Mycenae and also travelled in Crete; Dr. Kjellberg, who worked at Roman portraits; Dr. E. Smith, who studied Homeric archaeology; Dr. Snijder, whose special work was fourth-century sculpture; and Dr. Waldis, who studied Homeric and prehistoric Greece with the view to writing on the house of Atreus.

**Open Meetings.**—A well-attended meeting was held on March 25th, when Mr. E. H. Freshfield read a paper on the column of Arcadius at Constantinople, and Mr. S. Casson on the Early Iron Age in Macedonia. A second meeting, at which Sir Arthur Evans was to have spoken on Knossos and the Director on Mycenae, had unfortunately to be abandoned.

**Gustav Sachs Memorial Studentship.**—This studentship, which is tenable for next Session, has been awarded to Mr. A. G. Russell of Liverpool University.

The Committee wish to congratulate Miss L. Chandler, the first holder of this studentship, on being awarded the Cromer Prize, for work which they understand was mainly done while she was Sachs student in Athens.

**The Hostel.**—The Hostel has been very full throughout the session. During the session H.M. the King, Patron of the School, and H.M. the Queen, presented signed portraits of themselves. These have been framed and hung in the hall.

The War Memorial has now been finished and the hall re-decorated. The dining-room has also been re-decorated; a sideboard has been bought with

Mr. Adcock's gift, and a collection of portraits of founders and ex-directors of the School hung on the walls, so that the room has now lost some of its former bleak and uninviting aspect.

Many repairs external and internal will soon be necessary; the bedrooms, staircase and upper corridor will have to be distempered, and the outside woodwork requires painting. The provision of a better kitchen range and a dinner lift for the shaft that already exists would greatly facilitate the management of the Hostel.

**The Garden.**—The wall at the north end of the closed road has been repaired and raised. The garden itself was kept in very fair condition until a long drought and inadequate supply of water proved rather disastrous.

The tennis court, which has been much used, should be re-surfaced.

The increase in the number of mosquitoes is serious, and preventive measures will have to be taken.

**The Penrose Library.**—The Library has been open throughout the session, and has been much used by students, subscribers, members of the other foreign Schools, Greek scholars and other visitors.

Many new books have been added by exchange, purchase or gift, and the new accessions, including bound periodicals and pamphlets, amount to nearly four hundred items.

Much has been done to clear off the arrears in binding, and to fill up the gaps in periodicals caused by the war, and nearly all the exchanges with foreign periodicals are now working smoothly.

The list of desiderata is still large; the most important items are the new series of Arndt-Amelung, *Einzelaufnahmen*, and Herrmann-Bruckmann, *Antike Malerei*, and Boisacq, *Dictionnaire Etymologique*, of which we have only the first eleven parts.

The Hasluck Memorial Tablet has been erected in the place chosen by the Committee where all can see it on entering the Library.

Owing to pressure of work and illness the cabinet-maker has not yet begun the shelves, which are to be erected with the Hasluck Bequest.

**The Finlay Library.**—Mr. F. B. Welch has completed his voluntary task of making a complete catalogue of the Finlay Library, for which he deserves the heartiest thanks of the School.

Most of the war books and pamphlets recently added to this Library have been bound with the funds obtained by the sale of useless volumes.

**Excavations.**—The School excavations at Mycenae were begun by Miss Lamb on May 11th. Dr. Boethius arrived the next day, and the Director on

May 13th. A few days later they were joined by Miss Lorimer, Dr. Smith and Messrs. Heurtley and Hutchinson. The number of workmen employed at one time rose to fifty-five, but was gradually reduced until, when work closed on August 15th, there were only four. As in previous years, nearly all the workmen came from neighbouring villages, and many, owing to their past experience, were expert diggers. Georgios Alexopoulos was again foreman and gave complete satisfaction in every way.

The Director took charge of the excavation throughout, and with Dr. Boethius undertook the photography. Miss Lamb acted as second in command, and Mr. Hutchinson was Keeper of the Museum until his departure towards the close of the excavations, when Miss Eldridge of the American School kindly gave her assistance.

Mr. P. de Jong, who, owing to his work in Crete, did not arrive until June 12th, acted as architect and draughtsman. He made a series of plans of the tholos and other tombs, and made water-colour drawings of the more important vases.

Dr. Waldis joined the excavation towards the end, and Dr. C. W. Blegen of the American School paid a short visit at the end of July, when he gave most valuable help.

For financial assistance the School is much indebted to Sir Arthur Evans, Mr. G. Eumorfopoulos, Lord Abercromby, Mr. R. B. Seager, the University of Cambridge, Mr. and Mrs. Lamb, Miss Wills, and many other friends.

The work was principally devoted to Tombs : first to the Kalkani cemetery, and secondly to researches on the tholos tombs, and in particular the " tomb of Aegisthus," the newly-discovered tholos, for the excavation of which Sir Arthur Evans had given a special donation. The excavation of this tholos proved a longer task than was at first anticipated, and its completion is part of the work which has been left for next Session. The large chamber tomb under the road (Tomb No. 505) was also cleared, and here again the work was slow, as special precautions had to be taken to avoid a subsidence.

The finds, which include some most interesting tomb groups, many examples of Mycenaean jewellery, and a fine series of vases, both tend to confirm Mr. Wace's conclusions of last year, and also shed much new light on the Mycenaean Age.

Supplementary researches were carried out in the palace area, and a little experimental work on the Hellenistic theatre and gymnasium.

In June a small expedition was sent to examine and plan the Mycenaean fort on the summit of Mt. Hagios Elias, which overlooks Mycenae. Rear-Admiral Wardle of the British Naval Mission to Greece, who was visiting the excavation at the time, accompanied the expedition and gave assistance in planning the walls.

Among several visitors to the excavations were Sir Arthur Evans, Vice-Admiral and the Hon. Mrs. Aubrey Smith; Dr. Persson, who came with some of the Swedish excavators from Asine, and also several members of the foreign schools.

In addition to the School excavation at Mycenae, the Assistant-Director and Librarian, Mr. Casson, successfully completed his excavation, begun last year, of an Early Iron Age cemetery at Chauchitsa in Macedonia. Mr. A. W. Lawrence accompanied Mr. Casson on this expedition.

Professor and Mrs. Ure continued their work at Rhitsona, but did little excavating, spending most of their time in studying their previous finds. Out of the 47 tombs excavated during the past two seasons, 35 are now arranged and displayed in the Museum at Thebes.

With their customary courtesy the Greek archaeological authorities rendered every assistance in their power.

**Acknowledgments.**—The thanks of the School are due to Dr. Kyparissis, chief of the Archaeological Section of the Ministry of Education, to Drs. Kastriotis and Oikonomou of the National Museum, to the Ephors Drs. Chatzidakis, Keramopoulos, Xanthoudides, Philadelphcs and Pelekides, and to Dr. Svoronos, director of the Numismatic Museum, for their cordial help and assistance. Professor Tsountas' unselfish friendship regarding the work of the School at Mycenae should not be forgotten.

We have also to thank the Greek archaeological authorities for the gift of a cast of the interesting votive relief to Amphiaraios, which has been provisionally placed in the Library.

To the American School, which must be congratulated on its good fortune in the splendid gift of the Gennadion, we are much indebted. Mr. Hill, Dr. Blegen and Mr. Holland have helped in many ways, and there is a spirit of cordial co-operation between the two Schools.

Our relations with the other foreign schools continue to be of the best.

In Lord Granville, H.M. Minister, and Lady Granville, who left Athens during the session, the School has lost friends who were always ready to support it to the best of their power. Lord Granville's successor, the Hon. F. O. Lindley, and Mrs. Lindley have already shown their interest in the School's work.

To them and to all the staff of the Legation, especially Mr. Shirley Atchley, we wish to express our hearty thanks. Mr. Fontana, Mr. Knight and Mr. Eliades, the British Consular officers at Salonica, Volo and Candia, have given valuable assistance to members of the School on their travels. Mr. F. B. Welch, in addition to his work in the Finlay Library, has helped the School in every possible way.

Finally, we desire to thank the Swedish Historical Institute at Constantinople, who have offered accommodation there to members of the School.

**Finance.**—The Revenue amount for the year shows a credit balance of £596 gs. 5*d.* as compared with a similar balance of £268 8s. 1*d.* for the preceding year.

The total amount of Annual Subscriptions is £759 or £36 less than for the preceding year, while Donations are less by the large amount of £186.

The cost of the excavations at Mycenae has again been mainly defrayed by the special donations made for this object.

A considerable expenditure has still to be incurred in respect of the forthcoming number of the *Annual*, and will be charged in the next year's accounts.

In moving the adoption of the Report Sir ARTHUR EVANS referred to the deplorable political situation in the nearer East, and asked the Meeting to pass the following resolution to be forwarded to the Prime Minister and to His Majesty's Chief Secretary for Foreign Affairs.

“ That this meeting representing the British School at Athens and recognising the great services rendered to that institution by the Greek Government and people desires to impress on his Majesty's Government the urgent need of assistance on a national scale either by means of a direct subsidy or of a loan on liberal terms to save the refugees from Anatolia and Thrace.”

This resolution was carried “ *nem. con.*”

The adoption of the Report was seconded by Dr. THOMAS ASHBY and having been put to the meeting was carried unanimously.

Professor R. M. DAWKINS moved the following motion which was seconded by Miss W. LAMB and carried unanimously.

That Professor J. P. DROOP, Professor J. L. MYRES, Professor A. J. TOYNBEE and Mr. L. WHIBLEY be re-elected members of the Committee, that Mr. V. W. YORKE be re-elected Honorary Treasurer and that Mr. M. S. THOMPSON be re-elected Secretary of the School.

Sir ARTHUR EVANS then gave an account illustrated by lantern slides of his latest discoveries at Cnossos.

The proceedings closed with a hearty vote of thanks to Sir ARTHUR EVANS which was proposed by Mr. G. A. MACMILLAN and carried with applause.



## 445

[illegible]

### INCOME AND EXPENDITURE ACCOUNT.

	£	s.	d.		£	s.	d.
Balance from last Account	85	7	5	Expenses of Advertising and			
Interest from Investments	20	14	6	Postage	4	9	4
				Balance	101	12	7
	<u>£106</u>	<u>1</u>	<u>11</u>		<u>£106</u>	<u>1</u>	<u>11</u>

	£	s.	d.			£	s.	d.
Balance from last Account	278	11	4	Grant to Mr. Casson	.	40	0	0
				Balance	.	238	11	4
	<u>£278</u>	<u>11</u>	<u>4</u>			<u>£278</u>	<u>11</u>	<u>4</u>

*Chartered Accountant.*



## DONATIONS—1921-1922.

	£	s.	d.
Churchill, Capt. . . . .	20	0	0
Clark, E. K. . . . .	20	0	0
Courvoisier, Miss F. A. . . . .	1	0	0
Dickins, Mrs. G. . . . .	5	0	0
Freshfield, E. H. . . . .	11	0	0
Granville, Lord . . . . .	5	0	0
Low, Miss J. L. . . . .	3	3	0
Sharpe, Miss . . . . .	10	0	0
Tedd, H. G. . . . .	1	1	0
Thomas Cook & Sons . . . . .	5	0	0
Queen's College, Oxford . . . . .	5	0	0
	<u>£86</u>	<u>4</u>	<u>0</u>

## SPECIAL DONATIONS FOR EXCAVATIONS AT MYCENAE.

	£	s.	d.
Abercromby, Lord . . . . .	50	0	0
Burkitt, M. C. . . . .	5	0	0
Colegate, Mr. and Mrs. . . . .	3	3	0
Craven Fund—Cambridge University . . . . .	50	0	0
Craven Fund—Oxford University . . . . .	50	0	0
Droop, Professor . . . . .	5	0	0
Eumorfopoulos, G. . . . .	100	0	0
Evans, Sir A. J. . . . .	100	0	0
Gomme, A. W. . . . .	7	0	0
Granville, Lord . . . . .	5	0	0
Ireland Fund—Oxford University . . . . .	50	0	0
King, J. E. . . . .	10	0	0
Lamb, Mr. and Mrs. . . . .	30	0	0
Nairne, Brig.-Gen. . . . .	3	0	0
Seager, R. B. . . . .	55	0	0
Taylor, Mr. and Mrs. W. . . . .	5	0	0
Wills, Miss . . . . .	20	0	0
Other Donors . . . . .	6	1	0
	<u>£554</u>	<u>4</u>	<u>0</u>

## ANNUAL SUBSCRIPTIONS—1921-1922.

	£	s.	d.
The University of Cambridge . . . . .	100	0	0
The Hellenic Society . . . . .	100	0	0
The Oxford University (Ireland Fund). . . . .	50	0	0
The Leeds Library . . . . .	1	0	0
Brasenose College, Oxford . . . . .	5	0	0
Christ Church, Oxford . . . . .	30	0	0
Corpus Christi College, Oxford . . . . .	5	0	0
Magdalen College, Oxford . . . . .	20	0	0
McGill University . . . . .	20	0	0
St. John's College Library . . . . .	2	0	0
L'Association de Lectures Philologiques, Lausanne	2	0	0
Westminster School Library . . . . .	1	1	0
Emmanuel College, Cambridge . . . . .	5	0	0
Society of Antiquaries . . . . .	5	5	0
University College, Reading . . . . .	2	0	0
London Library . . . . .	2	0	0
King's College, Cambridge . . . . .	10	0	0
Balliol College Library . . . . .	3	3	0
University of Sheffield . . . . .	2	0	0
Otago Institute, Dunedin . . . . .	2	2	0
Wadham College, Oxford . . . . .	2	2	0
Carried forward	£369	13	0

	£	s.	d.
Brought forward	369	13	0
Abercromby, Lord . . . . .	2	2	0
Adcock, F. E. . . . .	1	0	0
Aldington, Mrs. . . . .	1	1	0
Allbutt, Prof. Sir T. C. . . . .	1	1	0
Allen, T. W. . . . .	1	1	0
Anderson, James . . . . .	1	1	0
Armitage, Prof. E. . . . .	1	1	0
Ashby, Thomas . . . . .	1	1	0
Ashmole, B. . . . .	2	2	0
Atkinson, Surg.-Capt. . . . .	1	0	0
Bailey, C. . . . .	1	1	0
Bailey, J. C. . . . .	1	0	0
Bagnani, Mrs. F. B. . . . .	1	1	0
Barber, E. G. . . . .	1	1	0
Barlow, Sir T. . . . .	2	2	0
Barrington, Mrs. E. J. . . . .	1	1	0
Bartlett, Eng.-Capt. . . . .	1	0	0
Bayley, Jones-, Pay-Com. . . . .	1	0	0
Beazley, J. D. . . . .	1	1	0
Carried forward	£392	10	0

	£	s.	d.
Brought forward	392	10	0
Benecke, P. V. M. . . . .	2	2	0
Bentinck, C. . . . .	1	1	0
Bevan, E. R. . . . .	1	0	0
Blackburn, Mrs. . . . .	1	1	0
Blomfield, Sir R. . . . .	2	2	0
Bosanquet, Prof. R. C. . . . .	1	1	0
Bridgeman, R. O. . . . .	2	0	0
Briggs, Miss M. G. . . . .	2	2	0
Brooks, E. W. . . . .	1	0	0
Browne, Rt. Rev. Bishop G. F. . . . .	1	1	0
Buchanan, Miss . . . . .	1	1	0
Buckler, W. H. . . . .	1	1	0
Burkitt, M. C. . . . .	2	2	0
Burnet, Sir J. J. . . . .	1	1	0
Bury, Prof. J. B. . . . .	1	1	0
Buxton, A. F. . . . .	1	1	0
Carlisle, Miss H. . . . .	1	1	0
Chance, A. F. . . . .	2	2	0
Chapman, Miss G. . . . .	1	1	0
Carried forward	£418	11	0

ANNUAL SUBSCRIPTIONS—1921-1922 (*continued*.)

	£	s.	d.		£	s.	d.
Brought forward	418	11	0	Brought forward	500	1	0
Chapman, Miss F. . . .	1	1	0	Hayes, Constructor-			
Christie, Miss A. . . .	2	2	0	Capt. G. P. . . . .	2	0	0
Clarke-Thornhill, T. B.	1	0	0	Hett, Capt. W. S. . . .	1	1	0
Colegate, Mr. and Mrs.				Hill, G. F. . . . .	2	2	0
A. . . . .	2	2	0	Hogarth, D. G. . . . .	1	1	0
Collingham, H. . . . .	1	1	0	Hopkinson, J. H. . . .	1	1	0
Constantinides, F. . . .	1	0	0	Hutton, Miss C. A. . .	5	5	0
Cooke, R. . . . .	1	1	0	Impey, E. . . . .	2	2	0
Cooper, Lt.-Com. . . . .	1	0	0	Impey, Miss . . . . .	2	2	0
Cousins, Lt.-Com. . . .	1	0	0	Jewell, H. H. . . . .	2	2	0
Crimp, Dr. G. L. . . . .	1	1	0	Kenyon, Sir F. G. . . .	1	1	0
Crowfoot, J. W. . . . .	2	2	0	Lacy, Lt.-Com. . . . .	1	0	0
Culley, Mrs. . . . .	1	0	0	Lamb, E. . . . .	2	0	0
Dawes, Miss E. A. S. . .	2	2	0	Lamb, Miss W. . . . .	2	2	0
Dawkins, R. M. . . . .	1	1	0	Lascelles, B. P. . . . .	1	0	0
Dawkins, J. M. . . . .	1	1	0	Lascelles, Viscount . .	2	0	0
Dickins, Mrs. Guy . . . .	1	1	0	Leaf, Walter . . . . .	50	0	0
Dickson, Miss N. . . . .	1	1	0	Leconfield, Lady . . .	2	2	0
Doll, C. C. T. . . . .	4	4	0	Lindley, Miss J. . . . .	1	1	0
Droop, J. P. . . . .	2	2	0	Lloyd, Miss . . . . .	1	1	0
Dundas, R. H. . . . .	2	0	0	Lloyd, Miss M. E. H. .	1	1	0
Elliot, Sir F. E. H. . . .	2	0	0	Low, Miss J. . . . .	2	2	0
Empedocles, G. . . . .	2	2	0	Lorimer, Miss H. L. . .	3	0	0
Empedocles, Mrs. M. . . .	1	1	0	McAlmon, Mrs. . . . .	1	1	0
Empedocles, Miss E. . . .	1	1	0	Macan, R. W. . . . .	1	1	0
Eumorfopoulos, N. . . . .	2	0	0	Macmillan, G. A. . . .	50	0	0
Evans, Sir A. J. . . . .	10	0	0	Macmillan, W. E. F. . .	1	1	0
Farquhar, The Lady E.	1	1	0	Marshall, J. H. . . . .	1	1	0
Farside, Mrs. . . . .	1	1	0	Mayor, R. J. G. . . . .	1	1	0
Fletcher, H. M. . . . .	1	1	0	Meikle, Mrs. . . . .	2	2	0
Forster, E. S. . . . .	1	0	0	Miller, Rev. A. . . . .	1	1	0
Fort, J. A. . . . .	1	0	0	Miller, W. . . . .	2	2	0
Fotheringham, J. K. . . .	1	0	0	Millingen, Mrs. Van . .	2	2	0
Furneaux, L. R. . . . .	1	0	0	Milne, J. G. . . . .	1	1	0
Gardiner, E. Norman . . .	2	0	0	Moloney, W. J. . . . .	1	1	0
Gardner, Prof. E. A. . . .	1	1	0	Mylne, Mrs. . . . .	2	2	0
Gardner, Prof. Percy . . .	2	2	0	Nairne, Brig.-Gen. . . .	3	1	0
Garstang, Prof. J. . . . .	2	0	0	Negreponte, Miss . . .	1	0	0
Gerstley, Mrs. J. . . . .	2	2	0	Newman, W. L. . . . .	2	2	0
Gidney, A. R. . . . .	1	1	0	Nightingale, Mrs. H. S.	1	1	0
Giveen, R. L. . . . .	1	1	0	Ogden, Mrs. P. . . . .	2	2	0
Gomme, A. W. . . . .	1	1	0	Ormerod, H. A. and			
Gooch, G. P. . . . .	1	1	0	M. R. . . . .	1	1	0
Goodwin, J. A. . . . .	2	2	0	Palairot, M. . . . .	2	0	0
Graves, P. . . . .	2	2	0	Palli, Mrs. F. L. . . . .	1	1	0
Griffith, F. L. . . . .	1	1	0	Pearson, Miss E. R. . .	2	0	0
Haigh, P. B. . . . .	1	1	0	Pennant, Hon. Alice			
Hall, H. R. . . . .	1	1	0	Douglas- . . . . .	1	1	0
Halliday, Miss C. H. . . .	1	1	0	Penoyre, J. B. . . . .	1	0	0
Halliday, W. R. . . . .	1	1	0	Penrose, Miss E. . . . .	1	1	0
Handcock, Dr. W. . . . .	2	2	0	Pesel, Miss Louisa F. .	1	1	0
Hart, P. . . . .	1	1	0	Petrocchino, D. P. . . .	5	0	0
Carried forward	£500	1	0	Carried forward	£679	14	0

ANNUAL SUBSCRIPTIONS—1921-1922 (*continued.*)

	£	s.	d.		£	s.	d.
Brought forward	679	14	0	Brought forward	712	0	0
Pickard-Cambridge, A. W.	2	2	0	Spencer, Lt.-Com.	1	0	0
Piddington, J. G.	2	2	0	Stocker, Com.	1	0	0
Pollock, Sir F.	1	1	0	Tancock, Capt. A. C.	1	1	0
Pyddoke, Miss M.	1	1	0	Tillyard, E. M. W.	1	0	0
Radford, Miss E.	1	1	0	Todd, M. N.	2	0	0
Reid, Dr.	1	1	0	Tuke, Miss	1	1	0
Rendall, Dr.	2	0	0	Ure, P. N.	2	0	0
Rendel, G. W.	2	2	0	Vince, J. H.	1	0	0
Ridgeway Prof. Sir W.	1	1	0	Wace, Mrs.	2	2	0
Road, Pay-Com. L.	1	0	0	Wagner, H.	2	2	0
Robinson, E. S. G.	1	1	0	Walker, J. S.	2	0	0
Roberts, Prof. W.				Walker, Mrs. J. S.	1	0	0
Rhys	1	1	0	Walston, Sir C.	1	1	0
Rodd, Sir R.	1	1	0	Ward, Dr. A. W.	1	0	0
Rotton, Sir J. F.	2	2	0	Wardle, Rear-Admiral	2	0	0
Salter, Mrs. H. de G.	1	1	0	Welch, F. B.	5	0	0
Sandys, Sir J. E.	1	1	0	Wells, J.	2	2	0
Seaman, Sir Owen	1	1	0	Whatley, W.	2	0	0
Seeborn, H. E.	2	2	0	Whibley, Leonard	2	2	0
Shove, Miss E.	1	1	0	Wigram, Rev. W. A.	1	1	0
Sikes, E. E.	1	1	0	Withers, J. J.	1	1	0
Sloane, Miss E. J.	2	2	0	Witt, Miss J.	3	3	0
Smith, Admiral A. H.	2	0	0	Woodhouse, Prof. W. J.	2	2	0
Smith, A. H.	1	1	0	Woodward, A. M.	1	1	0
				Wyndham, Hon. M.	1	1	0
				Yorke, V. W.	5	0	0
Carried forward	£712	0	0	Total	£759	0	0

## Subscriptions received during the year :—

	£	s.	d.
For 1914-15, Wigram, Rev. W. A.	1	1	0
„ 1915-16, Beazley, J. D.	1	1	0
„ 1915-16, Wigram, Rev. W. A.	1	1	0
„ 1916-17, Beazley, J. D.	1	1	0
„ 1916-17, Wigram, Rev. W. A.	1	1	0
„ 1917-18, Beazley, J. D.	1	1	0
„ 1917-18, Wigram, Rev. W. A.	1	1	0
„ 1918-19, Beazley, J. D.	1	1	0
„ 1918-19, Wigram, Rev. W. A.	1	1	0
„ 1919-20, Beazley, J. D.	1	1	0
„ 1919-20, Wigram, Rev. W. A.	1	1	0
„ 1920-21, Victoria University of Manchester	5	0	0
„ 1920-21, Beazley, J. D.	1	1	0
„ 1920-21, Chetwode, Mrs.	1	1	0
„ 1920-21, Dawes, Miss E. A. S.	2	2	0
„ 1920-21, Dawkins, J. M.	1	0	0
„ 1920-21, Richter, Miss G.	1	1	0
„ 1920-21, Wigram, Rev. W. A.	1	1	0
	12	6	0
	£23	17	0

ANNUAL SUBSCRIPTIONS—1921-1922 (*continued.*)

Subscriptions received in advance :—

	£	s.	d.
Burnett, Sir J. J. . . . .	1	1	0
Haigh, P. B. . . . .	1	1	0
Seebohm, H. E. . . . .	1	1	0
	<hr/>		
	£3	3	0
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## ANNUAL MEETING OF SUBSCRIBERS.

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THE Annual Meeting of Subscribers to the School was held in the Rooms of the Society of Antiquaries, Burlington House, on Tuesday, October 30th, 1923, the Very Reverend the DEAN of ST. PAUL'S in the Chair.

The Chairman of the Managing Committee, Mr. GEORGE A. MACMILLAN, before presenting the following Report on their behalf for the session 1922-1923, announced that Mrs. Sachs had increased the endowment of the Gustav Sachs Memorial Studentship so that in future a student could probably be appointed every three years, instead of every five years as hitherto.

As stated in last year's Report, Mr. A. J. B. Wace ceased to be Director at the end of the session, and will be succeeded by Mr. A. M. Woodward, who for the past year has held the post of Assistant-Director and Librarian. Mr. W. A. Heurtley has been appointed to fill the position vacated by Mr. Woodward.

The Committee desire to express their appreciation of the indefatigable zeal displayed by Mr. Wace throughout his long term of office as Director. Being first appointed at the end of the summer of 1914, Mr. Wace has been in charge of the School during the most critical period of its history.

Throughout the war he was attached to the British Legation in Athens and the Foreign Office; at the same time by never sparing himself he succeeded, in face of all difficulties, in keeping the scientific aspect of the School alive.

The rapid recovery of the School since the war is a great tribute to the personal energy of the Director, and also to his wide reputation as an excavator.

The Committee feel sure that all connected with the School will wish Mr. Wace every success in his future career.

No excavations, with the exceptions of a few test-pits, were made at Mycenae during the session, in order that as much time as possible might be

available for studying the objects already found with a view to their full publication in the near future.

After considering several possible sites for excavation for next session, the Committee finally came to the conclusion that they could not do better than return to Sparta, where the School before the war made such sensational discoveries.

As soon, therefore, as it had been ascertained that the Greek authorities were agreeable to such a proposal, the Chairman sent a letter to *The Times* announcing the decision of the Committee and asking for financial support. A circular letter is also being sent to all subscribers to the School, and to others interested in archaeology.

In order to do justice to so important a site, a campaign spread over several years will be necessary, and it is estimated that £2000 will be needed to cover initial expenses and the cost of the first year's work.

The Committee desire to express their thanks to the Greek Archaeological authorities for their most generous gift of duplicate ivories and other objects from the previous excavations of the School at Sparta. These have been divided between the British Museum, the Ashmolean Museum, Oxford, and the Fitzwilliam Museum, Cambridge.

**Director.**—The Director, Mr. A. J. B. Wace, was detained in Greece during the summer of 1922 first by business connected with the School, and secondly by illness, and so did not return to England till early in November. While in England he gave several lectures on the excavations at Mycenae, and after a brief holiday returned to Athens in January.

Since that date up to the end of September, except for a short tour in the islands and a visit to Knossos, he has been continuously employed in preparing the final publication of his excavations at Mycenae.

The Director gave several lectures in Athens on Mycenae during the session, and also, in conjunction with Dr. Blegen, a course on prehistoric Greece for members of the British and American Schools.

**Assistant-Director and Librarian.**—Mr. A. M. Woodward arrived in Athens in the middle of October and did not leave for England until late in July. Except for a visit to the Peloponnese, in order to examine the site of Sparta, and for a brief stay at Knossos, he was kept in Athens for the whole time by his multifarious duties connected with the Hostel, and by the amount of reorganisation still required in the Library. The absence of the Director in England from November until January naturally increased the work that fell to his lot.

**Students.**—There were three women students: Miss W. Lamb, Miss J. Webb and Miss J. Pybus.

Miss Lamb, who was only in Greece for a short time, came out again in order to help in the work at Mycenae; Miss Webb, of Melbourne University, paid a short visit to Knossos, and also travelled extensively in Greece. Miss Pybus, who was in Greece for the whole session, after spending the first three months in Athens, devoted the rest of her time to travelling and succeeded in visiting nearly all the more important sites.

Of the men, Mr. Heurtley, the only second-year student, travelled in Crete and in the Argolid and also helped at Mycenae. Mr. D. C. Macgregor, Fellow of Balliol College, and Mr. J. Bell, Fellow of Queen's College, Oxford, both spent most of their time in travelling. Mr. B. L. Hallward, the School student, made a special study of the campaigns of Brasidas, Perseus and Agesilaos in Thessaly; Mr. A. G. Russell, the Sachs student, studied the topography of Phlius; Mr. C. T. Seltman continued his studies of the Athenian coinage, and Mr. S. S. Clarke chose as his subject the historical topography of Epirus.

The Committee desire to congratulate Mr. Clarke on his appointment to a fellowship at Exeter College, Oxford, and Mr. Hallward on his appointment to a lectureship at Peterhouse College, Cambridge.

Professor O. Todd, of the University of British Columbia, was also admitted as a student.

Of former students, Mrs. Hasluck and Miss G. Richter stayed in the Hostel for a short time, and we were also glad to accommodate Dr. Frödin and other members of the Swedish expedition.

**The Hostel.**—The Hostel has been very full throughout the session. Of the repairs and improvements recommended last year, some have been done and others will shortly be carried out. A new kitchen range and a dinner lift have been put in, and the external painting is finished. Some whitewashing and painting upstairs remain to be done.

**The Director's House.**—This requires painting outside, and several minor repairs are also necessary.

**Publications.**—Volume XXIV. of the Annual, together with a Supplement, Part I. of "The Unpublished Objects from the Palaikastro Excavations," by Mr. R. C. Bosanquet and Professor R. M. Dawkins, was issued during the session. The second part will, it is hoped, be ready next year.

**The Library.**—The new shelving provided by the Hasluck Bequest was erected in the Penrose Library in January. Not only does it harmonise with the previously existing shelves, but it gives the Library an appearance of completeness, as well as being a most valuable addition to the available space.

To utilise it to the best advantage Mr. Woodward decided to rearrange all the periodicals excepting those of British or American origin. This involved the retyping of catalogue cards for some 1700 volumes. Besides this laborious



task, Mr. Woodward, in order to gain space, has had to rearrange and recatalogue in addition over 2000 volumes.

Advantage was taken of the rate of exchange during the early part of the year to have 265 volumes bound at the total cost of only £34.

Special mention must be made of the acquisition of the 900 photographs (three series) of the *Einzeltaufnahmen*, published by Bruckmann, needed to complete our set up to date, with accompanying text. This item, together with the cost of mounting on cards, and of making new buckram boxes to hold them, amounts in all to over £27 10s. of our total expenditure, but might have gone up in price had we waited longer.

Among the gifts received, special mention must be made of the valuable gift by the French School of twelve volumes, mostly of historical import, in the series 'Bibliothèque des Ecoles françaises d'Athènes et de Rome'; of Messrs. Macmillan's gift of the volumes needed to complete our third edition of Sir J. G. Frazer's *Golden Bough*; of Sir Arthur Evans' gift of *The Palace of Minos*, Vol. I.; and of Mr. Alexander Curle's sumptuous *Catalogue of Roman Silver Plate from Traprainlaw*; of special value also is the gift of various volumes, including interesting material dealing with the Cretan situation at the end of the nineteenth century, presented by the executors of the late J. D. Bouchier, which have found an appropriate home in the Finlay Library. Inclusive of these gifts, the total accessions to the School Library during the session number 386, of which 98 are bound volumes of periodicals, 62 pamphlets, and 226 new works, or volumes, or parts of works already contained there. The chief substantive works need not be specified, but it may be pointed out that they comprise important additions to practically every section of the Library, and will be found indispensable by serious students. Considerable attention has been devoted to securing volumes or instalments of works in continuation, in which many unsuspected gaps have been discovered in our sets. It is satisfactory to note that we have now completed and bound Boisacq's *Dictionnaire Etymologique*, that the Halle and Berlin *Winckelmannsprogramm* series are now complete to date, as also the Corpus of Greek Inscriptions, the Berlin *Münzen Nordgriechenlands*, Babelon's *Traité*, and the Catalogue of Vases in the Louvre. Some regrettable gaps still persist in our periodicals, notably the *Revue Archéologique* for 1918, 1919, and 1921, and the *Notizie degli Scavi*, 1914-21 inclusive, but many lesser gaps have been filled; among our newly-commenced exchanges the receipt of *Praehistorische Zeitschrift* and the *Antiquaries' Journal* are matters for congratulation, and it is most satisfactory to have resumed receipt of, and filled up the war-time gap in, the *Philologische Wochenschrift*.

Exchanges have also been arranged with the Institute of Catalan Studies, and the Universities of Upsala and Michigan.

Gifts of books have been received from the following, to whom our best thanks are due: the Trustees of the British Museum; the Hellenic Society; the Cambridge University Press; Messrs. Macmillan & Co.; the Society of Antiquaries of Scotland; the Government of India; La Société des Bollandistes; Bryn Mawr College, U.S.A.; the Société Archéologique d'Alexandrie; and, in Athens, the French School, the American School and the *Λαογραφικὸν Ἀρχεῖον*. The following authors have presented copies of their works; Professors F. Courby, W. Dörpfeld, G. Karo, F. Noack, F. Poulsen, F. Studniczka, Sir Arthur Evans, Sir Edgar and the Rev. W. A. Wigram, and Messrs. T. W. Allen, H. W. Bell, A. Boethius, S. Casson, M. Deffner, S. Eitrem, G. F. Hill, A. D. Keramopoulos, C. Kerofilas, E. Kjellberg, K. Kourouniotes, P. Lorenzatos, C. T. Seltman, J. Waldis, F. G. Welter, and the Director. Miscellaneous gifts of books or pamphlets are also acknowledged with thanks from Professors P. Jacobsthal and F. Noack; Bishop Charles Gore, the Rev. W. J. Barton, the Rev. F. Gavin; Messrs. T. W. Allen, C. H. Bentinck, C.M.G., R. C. Cumberbatch, D. G. Hogarth, W. A. Heurtley, J. Marshall, S. P. Noe, D. P. Petrocchino, F. B. Welch, the Director, and the Executors of the late J. D. Bouchier.

**Mycenae.**—In view of the decision to bring the excavations to a close, special efforts were made to get all Museum work both at Nauplia and at Athens finished.

In Athens Mr. P. de Jong was busy on the plans from January until May, when he went to Knossos for over two months. Monsieur E. Gilliéron was employed in restoring and drawing the frescoes and small objects.

The Director, who was busy in preparing the final report and making all arrangements for publication, was helped in Athens by Miss Lamb and Miss Pybus, and also by Miss Eldridge of the American School. When working in the Museum at Nauplia he was given valuable assistance by Professor Droop, who stayed there for a month, by Mr. Heurtley and by Mr. and Mrs. Gomme.

On July 31st the Director went to Mycenae for two weeks. During this period a little supplementary work was done on the palace to verify details for Dr. Holland's plan, a drain was dug round the tomb of "Aegisthus" to prevent damage by rain in winter, and the report as far as it existed in manuscript was checked on the spot.

A small excavation was made on the north side of the ridge of the tomb of Clytemnestra to verify a report of the existence of Cyclopean walls. The remains of a building were found, which seems to be part of a large and important structure dating at latest from the beginning of the third late Helladic period. The absence of floors in the building is most remarkable and it does not appear to be a house. This is the first large building at Mycenae, not definitely a tomb, which has been found outside the Acropolis wall and the Hellenistic town wall. It therefore deserves complete clearing and thorough investigation. This, however, must be left for other archaeologists.

**Acknowledgments.**—To Dr. Romaios, chief of the Archaeological Department of the Ministry of Education, to Dr. Kourouniotes, Director of the National Museum, Dr. Keramopoullos, Ephor of the Acropolis and Attica, Dr. Xanthoudides, Director of the Candia Museum, and Dr. Oikonomos we owe, as always, a heavy debt of gratitude for the courtesy with which they have given us every facility for studying and enjoying the treasures in their charge. Professor Tsountas, with his unselfish kindness, has as usual been ready to help us as regards the work at Mycenae. We much regret to have to record the deaths of Dr. Staes and Dr. Svoronos, the Directors of the National Museum and of the Coin Cabinet, two old friends to whom we were very much indebted. Their death has left a big gap which will not easily be filled. Dr. Hill, Director of the American School, with Drs. Blegen and Holland have once again shown that ready spirit of co-operation and good-fellowship which has always distinguished the relations of the two Schools. We are indebted to them in a hundred ways, but especially for their kindness in admitting students of the British School to the American School tours. Our relations with the other foreign Schools have been characterised by the same cordiality as before. We wish to express our deepest sympathy with M. Picard, Director of the French School, in the death of his younger son. Dr. Buschor of the German School very kindly gave a special series of lectures on the sculptures of the Acropolis for members of the British and American Schools. During the session the departure of the Hon. Francis and Mrs. Lindley from Athens was a source of regret to all. To Mr. and Mrs. Charles Bentinck and all the staff of H.M. Legation, especially Mr. Shirley Atchley, we wish to express our heartiest thanks for all their kindnesses towards the School. Mr. Hole, Mr. Knight and Mr. Eliades, the British Consular officers at Salonica, Volo and Candia, have again been most kind in assisting members of the School on their travels, and also Mr. Waugh and Mr. C. Cumberbatch, the Consular officers at Constantinople.

**Finance.**—The Revenue Account for the year shows a credit balance of £317 8s. 8*d.* as compared with a similar balance of £596 9s. 5*d.* for the preceding year. This figure includes the contributions to the Spartan Excavation Fund for which a special appeal has been issued, amounting to £237 5s., and this sum is necessarily earmarked for future expenditure at Sparta. The real credit balance for the year is therefore only some £80.

The total amount of Annual Subscriptions is £763 8s., or £4 8s. more than for the preceding year. Donations are more by £16 16s., but heavy though necessary expenditure on account of the library has resulted in an adverse balance on Capital Account of £126 19s. 8*d.*

The cost of the Excavations at Mycenae, which include some expenses in connection with the publication of the results of the work in previous seasons on the site, has amounted to the large sum of £342 13s. 2*d.*, while special Donations towards this work have only been £150.

The Dean of St. Paul's then moved the adoption of the Report, which was seconded by H.R.H. the Crown Prince of Sweden and having been put to the meeting was carried unanimously.

Miss HUTTON moved the following motion, which was seconded by Professor J. L. MYRES and carried unanimously :—

That Mrs. CULLEY be elected a member of the Committee; that Professor R. M. DAWKINS, Professor E. A. GARDNER, and Mr. G. W. RENDEL be re-elected members of the Committee, that Mr. V. W. YORKE be re-elected Hon. Treasurer and that Mr. M. S. THOMPSON be re-elected Secretary of the School.

Mr. A. M. WOODWARD, the newly appointed Director, gave an account illustrated by lantern slides of his plans for excavating at Sparta next spring.

Mr. A. J. B. WACE, the ex-Director, then gave an account illustrated by lantern slides of the excavations of the school at Mycenae.

A vote of thanks to the Chairman was moved by Mr. V. W. YORKE and carried with applause, and the proceedings closed after a speech by Sir ARTHUR EVANS thanking Mr. WACE for the work he had done for the school during his long Directorship and congratulating him on his brilliant discoveries at Mycenae.

## THE BRITISH SCHOOL AT ATHENS.

1922-1923.

## RECEIPTS AND EXPENDITURE ON ACCOUNT OF REVENUE.

3RD OCTOBER, 1922, TO 2ND OCTOBER, 1923.

	£	s.	d.		£	s.	d.
Subscriptions received during the year . . . . .	763	8	0	House Maintenance (as provided from London to August 31st, 1923) . . . . .	52	15	4
Subscriptions received for the year 1921-1922 . . . . .	18	6	0	Hostel Maintenance (as provided from London to August 31st, 1923) . . . . .	175	18	2
Government Grant . . . . .	500	0	0	Salary—Director . . . . .	500	0	0
Grant by the Commissioners of the Exhibition of 1851 . . . . .	200	0	0	Salary—Assistant Director . . . . .	200	0	0
Interest on Investments to July 5th, 1923 . . . . .	210	0	0	Salary—Secretary . . . . .	40	0	0
Interest on Deposit to June 30th, 1923 . . . . .	14	2	8	Publication of <i>Annual</i> . . . . .	533	17	6
Sale of <i>Annals</i> (Vols. I-XXIII) . . . . .	87	1	10	Rent . . . . .	10	0	0
Rents from Hostel . . . . .	196	16	0	Printing, Postage, etc. . . . .	56	11	6
Special Donations for Excavations at Mycenae . . . . .	150	0	0	Audit Fee . . . . .	5	5	0
Special Donations for Excavations at Sparta . . . . .	237	5	0	Loss on Exchange . . . . .	42	10	2
				Expenditure on Excavations at Mycenae . . . . .	342	13	2
				Studentship—Mr. Hallward . . . . .	100	0	0
				Balance being Excess of Receipts over Expenditure . . . . .	317	8	8
	<u>£2,376</u>	<u>19</u>	<u>6</u>		<u>£2,376</u>	<u>19</u>	<u>6</u>

## RECEIPTS AND EXPENDITURE ON CAPITAL ACCOUNT.

3RD OCTOBER, 1922, TO 2ND OCTOBER, 1923.

	£	s.	d.		£	s.	d.
Donations as per list . . . . .	103	0	0	To Book cases (chargeable to Hasluck Bequest) . . . . .	78	17	10
Entrance Fees . . . . .	27	6	0	Library . . . . .	138	3	1
Balance being Excess of Expenditure over Receipts . . . . .	126	19	8	Hostel Furnishing . . . . .	40	4	9
	<u>£257</u>	<u>5</u>	<u>8</u>		<u>£257</u>	<u>5</u>	<u>8</u>

	£	s.	d.		£	s.	d.
Subscriptions paid in advance	8	7	0	Investments—			
Anniversary Fund	289	0	6	£2,000 India 3% Stock at par			
The Gustav Sachs Trust Fund	21	5	3	£3,000 5% War Bonds at 95	4,850	0	0
Macedonian Exploration Fund				Cash at Bank—			
as per last account	238	11	4	Current Account	641	3	11
Fund for the support of Anna				Deposit Account	1000	0	0
Sokrides	100	0	0				
Balance, representing							
the assets of							
the School other							
than land, build-							
ings, furniture							
and library as per							
last account	5,697	18	4				
Add Balance of							
Revenue for the							
year	317	8	8				
	6,015	7	0				
Less Balance of							
Capital for the							
year	126	19	8				
	5,888	7	4				
	£6,545	11	5				

3RD OCTOBER, 1922, TO 2ND OCTOBER, 1923.

	£	s.	d.		£	s.	d.
Balance from last Account	101	12	7	Studentship (Mr. Russell)	100	0	0
Interest from Investments	20	15	3	Petty Expenses	1	2	7
				Balance	21	5	3
	£122	7	10		£122	7	10

Examined and found correct,  
W. CRANSTOUN TODD,  
3 Cannon Street, London, E.C. 4  
*Chartered Accountant.*

## DONATIONS--1922-1923.

	£	s.	d.
Bertram, Sir A. . . . .	5	0	0
Braunholtz, Mrs. . . . .	1	0	0
Fennell, R. N. . . . .	50	0	0
Gore, Bishop . . . . .	20	0	0
Herbert, Miss . . . . .	1	0	0
Queen's College, Oxford . . . . .	5	0	0
Smith, Admiral A. H. . . . .	20	0	0
Tillyard, H. J. W. . . . .	1	0	0
	<hr/>		
	£103	0	0
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## SPECIAL DONATIONS FOR EXCAVATIONS AT MYCENAE.

	£	s.	d.
Eumorfopoulos, G. . . . .	100	0	0
Walston, Sir C. . . . .	50	0	0
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	£150	0	0
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 Harrison, Miss, L.L.D., Newnham College, Cambridge.  
 Hart, Percival, Esq., Grove Lodge, Highgate, N.  
 Hasluck, Mrs. P. P., The Wilderness, Southgate, N.

- Heath, Mrs. M., The Laurels, Crebb's Causeway, Westbury-on-Trim.
- Hett, Walter S., Esq., Durnford House, Eastern Road, Brighton.
- Hill, G. F., Esq., LL.D., Litt.D., British Museum, W.C. 1.
- Hogarth, D. G., Esq., C.M.G., Ashmolean Museum, Oxford.
- Hollings, Mrs. Herbert, Watchetts, Frimley, Surrey.
- Hopkinson, Rev. J. H., Burnside Vicarage, nr. Kendal, Westmoreland.
- Hutton, Miss C. A., 49, Drayton Gardens, S.W. 10.
- Impey, E., Esq., The Manor House, Steeple Ashton, Trowbridge.
- Impey, Miss A. E., Britannia Club, 11, ὁδὸς Ἑπύρου, Athens.
- Iveagh, The Right Hon. Lord, 5, Grosvenor Place, S.W. 1.
- Jones, H. Stuart, Prof., Brasenose College, Oxford.
- Jones, Ronald P., Esq., 13, Hornton Street, W. 8.
- Kenyon, Sir Frederic, K.C.B., Litt.D., P.B.A., British Museum, W.C. 1.
- Lamb, E., Esq., Borden Wood, Liphook, Hants.
- Lamb, Miss W., Borden Wood, Liphook, Hants.
- Lambert, C., Esq., P.O. Box, 437, Jerusalem, Palestine.
- Lascelles, The Viscount, Chesterfield House, Mayfair, W. 1.
- Leaf, Mrs. Herbert, The Green, Marlborough.
- Leaf, Walter, Esq., Litt.D., 6, Sussex Place, Regent's Park, N.W. 1.
- Leconfield, The Lady, Petworth House, Petworth, Sussex.
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- Lloyd, Miss M. E. H., 73, Grange Road, Cambridge.
- Lorimer, Miss H. L., Somerville College, Oxford.
- Low, Miss J. I., Blebo, Cupar, Fife.
- McAlmon, Mrs., 1, South Audley Street, W. 1.
- Macan, R. W., Esq., Broom Hill, nr. Oxford.
- McIver, D. R., Esq., c/o Brown, Shipley & Co., 123, Pall Mall, S.W. 1.
- Macmillan, G. A., Esq., D.Litt., St. Martin's Street, W.C. 2.
- Macmillan, & Co., Ltd., Messrs., St. Martin's Street, W.C. 2.
- Macmillan, W. E. F., Esq., 42, Onslow Square, S.W. 7.
- Malcolm, The Lady Evelyn, 20, Sussex Place, W. 2.
- Marshall, F. H., Esq., 160, Goldhurst Terrace, N.W. 6.
- Marshall, Sir John, C.I.E., Benniore, Simla, India.
- Maufe, T. B., Esq., 15 Hanover House, N.W. 8.
- Mayor, R. J. G., Esq., C.B., Board of Education, Whitehall, S.W. 1.
- Meikle, Mrs., Hotel Continental, Athens.
- Miller, W., Esq.,
- Millingen, Mrs. Alexander Van, c/o British Linen Bank, 38, Threadneedle Street, E.C. 2.
- Milne, J. G., Esq., Bankside, Lower Bourne, Farnham, Surrey.
- Milne, Mrs. J. G., Bankside, Lower Bourne, Farnham, Surrey.
- Mitchison, Mrs., River Court, W. 6.
- Moloney, W. J., Esq., Reuter's Telegram Co., 276, Hornby Rd., Bombay.
- Murray, Messrs. John, 50, Albemarle Street, W. 1.
- Murray, Prof. G. G. A., Yatscombe, Boar's Hill, Oxford.
- Murray, Hallam, Esq., The Home Farm, Sandling, Hythe, Kent.
- \*Myres, Prof. J. L., The Copse, Hinksey Hill, Oxford.
- Nairne, Brig.-Gen., E. S. Hoare, C.B., D.S.O., Turville Lodge, Henley-on-Thames.
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- Ogden, Mrs. P., 22, Mallord Street, Chelsea, S.W. 3.
- Ormerod, Prof. H. A., M.C., 46, Cliff Rd., Hyde Pk., Leeds.
- Oswald, J. W. Gordon, Esq. (of Aigas), Beauly, Inverness-shire, N.B.
- Palairot, M., Esq., Foreign Office, Whitehall, S.W. 1.
- Palli, Mrs. F. L., c/o London & Westminster Bank, St. James's Square, S.W. 1.
- Pearson, Miss E. R., M.A., 70, Oxford Gardens, W. 10.
- Pease, Wilson, Esq., 22, Mount Street, W. 1.
- Penoyre, John, Esq., C.B.E., 8, King's Bench Walk, Inner Temple, E.C. 4.
- Penrose, Miss E., M.A., Somerville College, Oxford.
- Pesel, Miss Louisa, Elwell Manor, Weymouth.
- Petrococchino, D. P., Esq., C.B.E., 25, Rue de Timoleon, Athens.
- Piddington, J. G., Esq., c/o Messrs. Scott, Bell, & Co., 15, Queen Street, E.C. 4.
- Pollock, The Right Hon. Sir F., Bart., 21, Hyde Park Place, W. 2.
- Powell, Miss E., The Library, Somerville College, Oxford.

Provost, The, of Eton, The College, Eton.

Rackham, H., Esq., Christ's College, Cambridge.

Radford, Miss E., St. Anthony, nr. Port-Scatho, Cornwall.

Ralli, P., Esq., 17, Belgrave Square, S.W. 1.

Reid, Prof. J. S., Litt.D., Lismore, West Rd., Cambridge.

Rendall, The Rev. G. H., Litt.D., Dedham House, Dedham, Essex.

Rendel, G. W., Esq., c/o Foreign Office, Whitehall, S.W. 1.

Ridgeway, Prof. Sir W., Sc.D., Fen Ditton, Cambridge.

Roberts, Prof. W. Rhys, Tauranga, Cavell Avenue, Peacehaven, Sussex.

Robertson, D.S., Esq., Trinity College, Cambridge.

Robinson, E. S. G., Esq., 23, Upper Phillimore Gardens, W. 8.

Rodd, Sir Rennell, G.C.B., G.C.M.G., 25, Cavendish Square, W. 1.

Rosebery, The Right Hon. the Earl of, K.G., 38, Berkeley Square, W. 1.

Rothschild, Messrs. N. M., and Sons, New Court, E.C. 2.

Rothschild, The Lord, 148, Piccadilly, W. 1.

Rotton, Sir J. F., Lockwood, Frith Hill, Godalming.

Russell, A. G., Esq., 7, Lower Park Road, Hastings.

Salter, Mrs., 2, Campden Hill Gardens, W. 8.

Saumarez, The Right Hon. Lord de, Shrubland Park, Coddanham, Suffolk.

Scott, C. P., Esq., The Firs, Fallowfield, Manchester.

Scouloudi, Étienne, Esq., Athens, Greece.

Seaman, Sir Owen, 2, Whitehall Court, S.W. 1.

Seeböhm, Hugh, Esq., Poynder's End, Hitchin.

Seltman, C. T., Esq., 39, Barton Street, Cambridge.

Sharpe, Miss C., 1, Windmill Hill, Hampstead, N.W.

Shove, Miss E., 30, York Street Chambers, Bryanston Square, W. 1.

Sikes, E. E., Esq., St. John's College, Cambridge.

Sloane, Miss E. J., 13, Welford Road, Leicester.

Smith, A. H., Esq., British Museum, W.C. 1.

Smith, Admiral A. H., 87, Gloucester Place, W. 1.

Smith, Sir Cecil Harcourt-, C.V.O., LL.D., 62, Rutland Gate, S.W. 7.

Sowels, F., Esq., The Rookery, Thetford, Norfolk.

Tancock, Capt. A. D., c/o Messrs. Cox & Co., Charing Cross, W.C. 2.

Taylor, C. F., Esq., British School at Athens.

Thompson, H. Y., Esq., 19, Portman Square, W. 1.

Thompson, M. S., Esq., Garthlands, Reigate Heath, Surrey.

Tillyard, E. M. W., Esq., The Brook, Sawston, Cambridge.

\*Tillyard, Prof. H. J. W., The University, Birmingham.

Tod, M. N., Esq., O.B.E., Oriel College, Oxford.

Tuke, Miss Margaret, Bedford College, Regent's Park, N.W. 1.

Vince, J. H., Esq., Esp Hall, Ulpha, Cumberland.

Wace, A. J. B., Leslie Lodge, 1, Avenue Rd., St. Albans.

Wagner, H., Esq., 13, Half Moon Street, W. 1.

Walker, J. S., Esq., 6, Odos Kriezotou, Athens.

Waldis, Dr. J., Musseggstrasse, 33, Lucerne, Switzerland.

Walston, Sir Charles, Litt.D., Newton Hall, nr. Cambridge.

Welch, F. B., Esq., British Legation, Athens.

Wells, J., Esq., Wadham College, Oxford.

West, H. H., Esq., The Chase, Lower Bourne, Farnham, Surrey.

Whatley, N. W., Esq., Clifton College, Bristol.

Whibley, . . . . . Woodlands, Wrecclesham.

Wigram, Rev. Dr. W. A., D.D., Watling House, St. Albans.

Witt, Miss, 16, Queensborough Terrace, Hyde Park, W. 1.

Woodhouse, Prof. W. J., The University, Sydney, N.S.W.

Woodward, A. M., Esq., British School, Athens.

Woodward, W. H., Esq., Burlington Fine Arts Club, 17, Savile Row, W. 1.

Wyndham, Hon. Margaret, 12, Great Stanhope Street, W. 1.

Yorke, V. W., Esq., Farrington Works, Shoe Lane, E.C. 4.

\*Zimmern, Prof. A. E., 43, St. James' Court, Buckingham Gate, S.W. 1.



## DIRECTORS OF THE SCHOOL.

1886—1924.

\*F. C. PENROSE, M.A., D.C.L., LL.D., F.R.S., 1886—1887.

ERNEST A. GARDNER, Litt.D., 1887—1895.

CECIL HARCOURT-SMITH, LL.D., C.V.O., 1895—1897.

DAVID G. HOGARTH, M.A. C.M.G., 1897—1900.

R. CARR BOSANQUET, M.A., 1900—1906.

R. McG. DAWKINS, M.A., 1906—1914.

A. J. B. WACE, M.A., 1914—1923.

A. M. WOODWARD, M.A., 1923—

## HONORARY STUDENTS OF THE SCHOOL.

1886—1924.

Prof. J. B. Bury. LL.D., Litt.D., D.Litt.	King's College, Cambridge. Elected 1895.
Sir Arthur J. Evans. LL.D., D.Litt., F.R.S.	Late Keeper of the Ashmolean Museum, Oxford. Elected 1895.
Prof. J. Linton Myres. M.A.	A former Student of the School. Elected 1896.
Prof. Ernest Gardner. Litt.D.	Director of the School, 1887—1895. Elected 1897.
*Prof. A. van Millingen. M.A., D.D.	Professor of History at Robert College, Constantinople. Elected 1904.
*W. H. Forbes. M.A.	Late Fellow of Balliol College, Oxford. Elected 1906.
Prof. W. J. Woodhouse.	Professor in the University of Sydney. Formerly Student of the School. Elected 1908.
A. J. B. Wace. M.A.	Director of the School, 1914—1923. Late Lecturer in Ancient History and Archaeology at the University of St. Andrews. Elected 1912.
J. D. Beazley. M.A.	Student and Tutor of Christ Church, Oxford. Elected 1914.
E. N. Gardiner. M.A.	Corpus Christi College, Oxford. Elected 1914.
Prof. R. McG. Dawkins. M.A.	Hon. Fellow of Emmanuel College, Cambridge. Director of the School, 1906—1914. Elected 1914.
*F. W. Hasluck. M.A.	Late Fellow of King's College, Cambridge. Formerly Assistant Director and Librarian of the School. Elected 1915.

\* Deceased.

# STUDENTS OF THE SCHOOL.<sup>1</sup>

1886—1924.

Ernest A. Gardner. Litt.D.	Formerly Fellow of Gonville and Caius College. Vice-Chancellor, Yates Professor of Archaeology and Public Orator in the University of London. Admitted 1886—87 as Cambridge and Craven University Student. Director of the School, 1887—1895. Hon. Student of the School.
David G. Hogarth. M.A., D.Litt., C.M.G.	Fellow and formerly Tutor of Magdalen College, Oxford, and first Craven Fellow. Keeper of the Ashmolean Museum, Director of the School 1897—1900. Admitted 1886—87. Re-admitted (for work in Cyprus) 1887—88.
*Rupert C. Clarke. M.A.	Exeter College, Oxford. Rector of Ellesborough, Bucks, and Rural Dean of Wendover. Admitted 1886—87.
F. H. H. Guillemard. M.A., M.D., F.L.S., etc.	Gonville and Caius College, Cambridge. First University Reader in Geography. Admitted (for work in Cyprus) 1887—88.
Montague R. James. Litt.D.	Provost of Eton. Late Director of the Fitzwilliam Museum. Admitted (for work in Cyprus) 1887—88, with grant of £100 from the University, Cambridge.
R. Elsey Smith. F.R.I.B.A.	Professor of Architecture and Construction, University College, London. Appointed to Studentship of Royal Institute of British Architects, 1887—88.
R. W. Schultz Weir (R. Weir Schultz).	Admitted as Gold Medallist and Travelling Student in Architecture of the Royal Academy of Arts, 1887—88. Re-admitted 1888—89, 1889—90.
Sidney H. Barnsley.	Admitted as Student of the Royal Academy, 1887—88. Re-admitted 1889—90, 1890—91.
J. A. R. Munro. M.A.	Rector of Lincoln College, Oxford. Admitted (for work in Cyprus) 1888—89. Re-admitted (for same purpose) 1889—90.
H. Arnold Tubbs. M.A.	Pembroke College, Oxford. Professor of Classics at University College, Auckland, N.Z. Craven University Fellow. Admitted (for work in Cyprus) 1888—89. Re-admitted (for same purpose) 1889—90.
Sir J. G. Frazer. LL.D., D.C.L.	Fellow of Trinity College, Cambridge. Admitted 1889—90.
†William Loring. M.A.	Late Fellow of King's College, Cambridge. Warden of Goldsmiths' College, New Cross. Secretary of the School, 1897—1903. Appointed to Cambridge Studentship, 1889—90. Re-admitted as Craven University Student, 1890—91, 1891—92, and 1892—93.

<sup>1</sup> \* Before a name signifies "deceased." † Signifies "died on Active Service." For the war-service, military and otherwise, rendered by Students of the School, see Vol. XXIII, p. viii.

† Died of wounds, October 22nd, 1915.

- W. J. Woodhouse. M.A. Queen's College, Oxford. Professor of Greek in the University of Sydney, N.S.W. Formerly Lecturer in Ancient History and Political Philosophy at the University of St. Andrews. Appointed to Oxford Studentship, 1889-90. Re-admitted as Craven University Fellow, 1891-92 and 1892-93. Re-admitted 1908, 1921. Honorary Student of the School.
- G. C. Richards. M.A. Late Fellow of Hertford College. Fellow and Tutor of Oriel College, Oxford. Formerly Professor of Greek at University College, Cardiff. Admitted as Craven University Fellow, 1889-90. Re-admitted 1890-91.
- O. H. Parry. M.A. Magdalen College, Oxford. Vicar of All Hallows, East India Dock. Formerly Archbishop's Missioner to the Nestorian Christians. Admitted 1889-90.
- J. F. R. Stainer. M.A., B.C.L. Magdalen College, Oxford. Admitted 1889-90.
- \*R.A.H. Bickford-Smith. M.A., F.S.A. Trinity College, Cambridge. Admitted 1889-90.
- A. G. Bather. M.A. Late Fellow of King's College, Cambridge. Late Assistant Master at Winchester College. Admitted 1889-90. Re-admitted 1891-92, on appointment to the Cambridge Studentship; 1892-93 as Prendergast Greek Student; and again, 1893-94, as Cambridge Student.
- E. E. Sikes. M.A. Fellow and Tutor of St. John's College, Cambridge. Appointed to Cambridge Studentship, 1890-91.
- J. G. Milne. M.A. Corpus Christi College, Oxford. Assistant Secretary in the Board of Education. Appointed to Oxford Studentship, 1890-91.
- H. Stuart-Jones. M.A. Fellow and formerly Tutor of Trinity College, Oxford. Camden Professor of Ancient History in the University of Oxford. Formerly Director of the British School at Rome. Admitted as Craven University Fellow, 1890-91. Re-admitted 1892-93.
- Miss Eugénie Sellers (Mrs. S. Arthur Strong). Life Fellow of Girton College, Cambridge. Assistant Director of the British School at Rome. Formerly Keeper of the Duke of Devonshire's Collections. Admitted 1890-91.
- F. Brayne Baker. M.A. Sometime Scholar of Christ's College, Cambridge. Assistant Master at Malvern College. Admitted 1891-92.
- C. C. Inge. M.A. Magdalen College, Oxford. Vicar of St. Giles', Oxford. Appointed 1891-92 to the Oxford Studentship.
- E. F. Benson. B.A. King's College, Cambridge. Admitted 1891-92, with grant of £100 from the Worts Fund at Cambridge; 1892-93 on appointment to the Cambridge Studentship; 1893-94 as Craven Student; and 1894-95 as Prendergast Student.
- J. G. Piddington. B.A. (J. G. Smith). Magdalen College, Oxford. Admitted 1891-92. Re-admitted 1895-96.
- V. W. Yorke. M.A. Late Fellow of King's College, Cambridge. Hon. Treasurer of the School. Admitted 1892-93. Re-admitted 1893-94.

- J. L. Myres. M.A. Wykeham Professor of Ancient History in the University of Oxford. Formerly Fellow of Magdalen College, Oxford. Student and Tutor of Christ Church. University Lecturer in Classical Archaeology. Gladstone Professor of Greek in the University of Liverpool. Admitted 1892—93 as Craven Fellow. Re-admitted 1893—94 and 1894—95. Hon. Student of the School.
- R. J. G. Mayor. M.A., C.B. Late Fellow of King's College, Cambridge. Assistant Secretary in the Board of Education. Admitted 1892—93.
- R. C. Bosanquet. M.A. Trinity College, Cambridge. Late Professor of Classical Archaeology in the University of Liverpool. Assistant Director of the School, 1899—1900. Director 1900—1906. Admitted 1892—93. Re-admitted 1894—95. Re-admitted as Craven University Student 1895—96 and 1896—97.
- Sir J. M. Cheetham. M.A., K.C.M.G. Christ Church, Oxford. H.M. Envoy Extraordinary and Minister Plenipotentiary at Athens. Admitted (Oxford Studentship) 1892—93.
- E. R. Bevan. M.A. New College, Oxford. Admitted 1893—94.
- A. F. Findlay. M.A. Sent out as holder of Brown-Downie Fellowship by the United Presbyterian Church, Divinity Hall, Edinburgh. Admitted 1894—95.
- J. G. Duncan. M.A., B.D. Sent out from Aberdeen by the Church of Scotland. Minister of Kirkmichael, Ballindalloch, N.B. Admitted 1894—95.
- J. E. Brooks. M.A. St. Peter's College, Cambridge. Admitted 1894—95. Re-admitted as Associate 1896—97.
- \*H. Awdry. M.A. New College, Oxford. Assistant Master at Wellington College. Admitted 1894—95.
- Duncan Mackenzie. M.A. (Edin.), Ph.D. (Vienna). Universities of Edinburgh and Vienna. Carnegie Fellow in History at the University of Edinburgh. Admitted 1895—96. Re-admitted 1896—97, 1897—98 and 1898—99.
- Archibald Paterson. University of Edinburgh. Admitted 1895—96.
- C. R. Rowland Clark. Student of the Royal Academy. Appointed 1895—96, and re-appointed 1896—97, by the Managing Committee to an Architectural Studentship.
- C. C. Edgar. B.A. Oriel College, Oxford. Inspector of Antiquities for Lower Egypt. Admitted 1895—96, and re-admitted 1896—97 (as Craven University Fellow), 1897—98 and 1898—99.
- F. R. Earp. M.A. Late Fellow of King's College, Cambridge. Admitted 1896—97.
- \*F. A. C. Morrison. M.A. Jesus College, Cambridge. Admitted (as Prendergast Greek Student) 1896—97.
- H. H. West. M.A. Formerly of Trinity College, Cambridge. Admitted 1896—97.
- Miss C. A. Hutton. Girton College, Cambridge. Hon. Secretary of the Society for the Promotion of Hellenic Studies. Admitted 1896—97.

- J. G. C. Anderson. M.A. Formerly Fellow of Lincoln College. Student, Tutor, and sometime Senior Censor of Christ Church, Oxford. Admitted (as Craven University Fellow) 1896-97.
- J. W. Crowfoot. M.A. Brasenose College, Oxford. Director of Education, Sudan Government. Formerly Inspector in the Ministry of Education, Cairo. Admitted, on appointment to the Oxford Studentship, 1896-97. Re-admitted 1897-98.
- W. W. Reid. B.D. Universities of Aberdeen and Edinburgh. Minister of the Church of Scotland, Dumbarton, N.B. Admitted, as holder of Blackie Travelling Scholarship, 1896-97.
- A. E. Henderson. F.S.A., F.R.I.B.A. Owen Jones Student of Royal Institute of British Architects, 1897-98. Admitted 1897-98. Re-admitted 1898-99, 1901-2, and 1902-3.
- W. A. Curtis. D.Litt., D.D. (Edin.). Heriot Scholar of Edinburgh University. Regius Professor of Biblical Criticism and Biblical Antiquities in the University of Edinburgh. Formerly Professor of Systematic Theology in the University of Aberdeen. Admitted 1897-98.
- A. J. Spilsbury. M.A. Queen's College, Oxford. Head Master of Wakefield Grammar School. Formerly Senior Classical Master, City of London School. Admitted 1897-98, on appointment to the Oxford Studentship.
- E. B. Hoare. Magdalen College, Oxford. Admitted 1897-98, as Architectural Student.
- J. C. Lawson. M.A. Fellow, Tutor and Lecturer of Pembroke College, Cambridge. Admitted as Craven University Student, 1898-99. Re-admitted 1899-1900.
- C. D. Edmonds. M.A. Emmanuel College, Cambridge. Assistant Master at Berkhamstead School. Formerly at Aldenham School and at Royal Naval College, Osborne. Admitted as Prendergast Student, 1898-99.
- Sir John H. Marshall, Kt. C.I.E., Litt.D., F.S.A. Scholar of King's College, Cambridge. Director-General of the Archaeological Survey of India. Admitted 1898-99. Re-admitted as Prendergast Student, 1900-1, Craven Student, 1901-2.
- \*Clement Gutch. M.A. King's College, Cambridge. Lecturer at St. John's College, Cambridge. Admitted, 1898-99, on appointment to the Cambridge Studentship.
- F. B. Welch. M.A. Magdalen College, Oxford. Vice-Consul, Athens. Formerly Head Master of Wadham House Prep. School, Hale, Cheshire. Admitted as Craven University Fellow, 1898-99. Re-admitted 1899-1900.
- T. D. Atkinson. F.R.I.B.A. Surveyor to the Dean and Chapter of Ely, to the Dean and Chapter of Winchester, and to the Warden and Fellows of Winchester College. Admitted as Architectural Student, 1898-99.
- J. K. Fotheringham. M.A., D.Litt. Merton and Magdalen Colleges, Oxford. Formerly Fellow of Magdalen College, Oxford. Reader in Ancient History in the University of London. Assistant in the University Observatory, Oxford. Admitted on appointment to Oxford Studentship, 1898-99.

- J. H. Hopkinson. M.A. University College, Oxford. Vicar of Burnside, Kendal. Formerly Warden of Hulme Hall and Lecturer in Classical Archaeology, University of Manchester. Admitted as Craven University Fellow, 1899—1900 and 1900—1.
- \*Miss O. C. Köhler (Mrs. Charles Smith). Girton College, Cambridge. Admitted 1899—1900.
- D. Theodore Fyfe. F.R.I.B.A. Surveyor to the Dean and Chapter of Chester. Master of the School of Architecture, Cambridge. Architectural Association Travelling Student, 1899. Admitted 1899—1900, on appointment to Architectural Studentship.
- †K. T. Frost. M.A., F.R.G.S. Brasenose College, Oxford. Lecturer at the Queen's University, Belfast. Admitted on appointment to the Oxford Studentship, 1900—1.
- R. D. Wells. M.A., F.R.I.B.A. Trinity College, Cambridge. Admitted on appointment to the Architectural Studentship, 1900—1.
- John Penoyre. M.A., C.B.E. Keble College, Oxford. Secretary and Librarian to the Society for the Promotion of Hellenic Studies. Secretary to the British School at Athens, 1905—1919. Admitted 1900—1. Re-admitted 1906—7, 1907—8.
- Marcus N. Tod. M.A., O.B.E. Fellow of Oriel College, Oxford, and University Lecturer in Greek Epigraphy. Craven University Fellow. Assistant-Director of the School 1902—4. Admitted on appointment to "Senior Studentship," 1901—2.
- \*F. W. Hasluck. M.A. Sometime Fellow of King's College, Cambridge. Assistant Director and Librarian of the School from 1906—1915. Admitted on appointment to Cambridge Studentship 1901—2. Re-admitted 1902—3, 1904—5, 1905—6. Honorary Student of the School.
- C. Heaton Comyn. F.R.I.B.A., M.R.San.I. Admitted on appointment to the Architectural Studentship, 1901—2. Re-admitted 1903—4.
- Miss H. L. Lorimer. Girton College, Cambridge. Classical Tutor of Somerville College, Oxford. Admitted as Pfeiffer Travelling Student, 1901—2. Re-admitted 1910—11, 1921—22.
- Baroness E. Rosenörn-Lehn. Royal Holloway College, and University College, London. Admitted 1901—2.
- A. P. Oppé. B.A. New College, Oxford. Examiner in the Board of Education. Sometime Lecturer in Greek at St. Andrews University. Lecturer in Ancient History at Edinburgh University. Deputy Director and Secretary Victoria and Albert Museum. Admitted 1901—2.
- W. L. H. Duckworth. M.D., Sc.D. Fellow of Jesus College, Cambridge. University Lecturer in Physical Anthropology. Admitted 1902—3.
- C. T. Currelly. M.A., F.R.G.S., F.R.S.C. Victoria College, Toronto. Director of the Royal Ontario Museum. Formerly Assistant to Professor Flinders Petrie, under the Egypt Exploration Fund. Admitted 1902—3. Re-admitted 1903—4.
- R. McG. Dawkins. M.A. Hon. Fellow of Emmanuel College, Cambridge. Bywater Professor of Byzantine and Modern Greek Language and Literature in the University of Oxford. Director of the School from 1906—14. School Student. Admitted as Craven Student, 1902—3. Re-admitted 1903—4, 1904—5, 1905—6.

\* Deceased.

† Killed in action, September 4th, 1914.

- E. S. Forster. M.A., F.S.A., M.B.E. Bishop Frazer's Scholar, Oriel College, Oxford. Professor of Greek in the University of Sheffield. Formerly Assistant Lecturer in the University College of N. Wales. Admitted on appointment to the Oxford Studentship, 1902-3. Re-admitted 1903-4, with grants from the Craven Fund and Oriel College.
- A. J. B. Wace. M.A. Formerly Fellow of Pembroke College, Cambridge. Deputy Keeper in the Victoria and Albert Museum. Sometime Lecturer in Ancient History and Archaeology in the University of St. Andrews. Norton Lecturer of the American Archaeological Institute, 1923-24. Prendergast Student. Craven Student. Admitted 1902-3. Re-admitted 1903-4, 1904-12. Director of the School, 1914-23. Honorary Student of the School.
- †E. W. Webster. M.A. Fellow of Wadham College, Oxford. Taylorian Scholar in German, 1901. John Locke Scholar in Mental Philosophy 1904. Admitted 1902-3.
- J. B. Fulton. A.R.I.B.A. Soane Student. Admitted 1902-3.
- E. F. Reynolds. Admitted 1902-3.
- M. Cary. M.A. (M. O. B. Caspari). Late Scholar of Corpus Christi College, Oxford. Reader in Ancient History in the University of London. University Scholar in German. Admitted 1903-4.
- J. L. Stokes. B.A. Formerly Scholar of Pembroke College, Cambridge. Librarian of Charterhouse School since 1905. Admitted (as Holder of the Prior Scholarship from Pembroke College), 1903-4.
- Miss M. K. Welsh (Mrs. A. M. Daniel). Newnham College, Cambridge. Holder of the Marion Kennedy Studentship. Admitted 1903-4.
- †G. Dickins. M.A. Fellow of St. John's College, Oxford. Craven University Fellow. Admitted 1904-5, 1905-6. Re-admitted as School Student, 1906-7. Re-admitted 1907-8, 1908-9, 1912-13.
- C. C. T. Doll. M.A. Trinity College, Cambridge. Superintending Architect at the excavations at Knossos 1905-12. Admitted 1904-5.
- C. H. Hawes. M.A. Trinity College, Cambridge. Assistant Director, Boston Museum of Natural History. Late Professor of Anthropology, Dartmouth College, U.S.A. Admitted 1904-5, 1908-9.
- W. A. Kirkwood. M.A. (Harvard), Ph.D. (Harvard). University College, Toronto. Registrar of Trinity College, Toronto. Admitted 1904-5.
- H. J. W. Tillyard. D.Litt. (Edinburgh), M.A. Caius College, Cambridge. Reader in Russian, University of Birmingham. Formerly Professor of Classics, University College, Johannesburg, South Africa. Late Lecturer in Greek, University of Edinburgh. Admitted 1904-5 as Assistant Librarian. Re-admitted 1905-6 (on appointment to Studentship), 1906-7, 1908-9. Re-admitted 1912-13.
- Miss G. M. A. Richter. Litt.D. Girton College, Cambridge. Associate Curator in Department of Classical Antiquities, Metropolitan Museum of Art, New York. Admitted 1904-5.

† Killed in action, April 9th, 1917.

† Died of wounds, July 17th, 1916.

- J. P. Droop. M.A. Trinity College, Cambridge. Professor of Classical Archaeology in the University of Liverpool. Late Assistant to Dr. Stein in the arrangement of his collections. Admitted 1905—6, 1906—7 (Prendergast Student), 1907—8 (School Student), 1908—9, 1910—11, 1912—13, 1913—14. Re-admitted 1921—22.
- Miss M. Hamilton. M.A., D.Litt. (Mrs. L. Caskey). University of St. Andrews. Holder of a Research Fellowship under the Carnegie Trust. Admitted 1905—6, 1906—7.
- A. C. B. Brown. M.A. Scholar of New College, Oxford. Fereday Fellow of St. John's College, Oxford. Formerly Assistant Lecturer in Classics, Manchester University. Assistant Master at Marlborough College. Admitted 1905—6.
- F. Orr. Admitted 1905—6.
- R. Traquair. F.R.I.B.A. Admitted 1905—6 (on appointment to an Architectural Studentship). Professor of Architecture, McGill University, Montreal. Re-admitted 1906—7, as Student of the Byzantine Fund.
- Miss E. B. Abrahams. M.A. (Mrs. Culley). Bedford College, London. Admitted 1905—6.
- W. J. Farrell. M.A. Late Fellow of Jesus College, Cambridge. Admitted 1906—7, 1907—8, 1908—9, 1909—10.
- Walter S. George. Travelling Student in Architecture of the Royal College of Art. Soane Medallist of Royal Institute of British Architects. Late Assistant to Architects of Imperial Delhi. Admitted 1906—7. Re-admitted 1908—9, 1909—10, as student of the Byzantine Research Fund. Re-admitted 1912—13.
- T. E. Peet. M.A. Queen's College, Oxford. Officer of Egypt Exploration Society and Professor of Egyptology in the University of Liverpool. Admitted as Craven Fellow, 1906—7, and as Pelham Student in the British School at Rome 1908—9.
- A. M. Woodward. M.A. Late Classical Demy of Magdalen College, Oxford. Director of the School. Formerly Lecturer in Ancient History at the University of Leeds. Assistant Director, 1909—10, 1922—23. Admitted 1906—7, 1907—8, 1908—9.
- W. M. Calder. B.A. Christ Church, Oxford. Professor of Greek in Victoria University, Manchester. Formerly Wilson Travelling Fellow, Aberdeen University. Research Student, Brasenose College, Oxford. Admitted 1907—8.
- W. Harvey. Gold Medallist and Travelling Student of the Royal Academy. Admitted 1907—8.
- H. Pirie-Gordon. M.A., D.S.C. Magdalen College, Oxford. Admitted 1907—8.
- M. S. Thompson. M.A., O.B.E. Corpus Christi College, Oxford. Holder of Chas. Oldham Scholarship. Craven Fellow, School Student. Admitted 1907—8, 1908—9, 1909—10, 1910—11, 1911—12. Secretary of the British School at Athens.
- A. C. Sheepshanks. B.A. Trinity College, Cambridge. Assistant Master at Eton. Admitted 1907—8.
- N. Whatley. M.A. Late Fellow of Hertford College, Oxford. Headmaster of Clifton College. Admitted 1907—8.



- †G. L. Cheesman. M.A. Fellow and Lecturer of New College, Oxford. Admitted 1908-9.
- A. W. Gomme. B.A. Trinity College, Cambridge. Lecturer in Greek History and Archaeology, University of Glasgow. Previously Assistant Lecturer in Classics, Liverpool University. Prendergast Student. Admitted 1908-9, 1919-20, 1922-23.
- L. B. Budden. M.A., A.R.I.B.A. Travelling Student in Architecture of the University of Liverpool. Admitted 1909-10.
- S. W. Grose. M.A. Christ's College, Cambridge. Fellow and Tutor of Christ's College, Cambridge. From 1914, cataloguing McClean Collection of Greek Coins in the Fitzwilliam Museum. School Student. Admitted 1909-10.
- H. A. Ormerod. M.A., M.C. Queen's College, Oxford. Professor of Classics in the University of Leeds. Assistant Lecturer in Greek, University of Liverpool. Admitted 1909-10, 1910-11.
- H. H. Jewell. Royal Academy Gold Medallist. Admitted 1909-10.
- W. R. Halliday. B.A., B.Litt. New College, Oxford. Rathbone Professor of Ancient History in the University of Liverpool. Craven Fellow. Admitted 1910-11. Re-admitted 1912-13.
- Miss D. Lamb. M.B.E. (Mrs. J. R. Brooke). Newnham College, Cambridge. Admitted 1910-11. Re-admitted 1913-14.
- Miss L. E. Tennant (Mrs. F. J. Watson Taylor). Admitted 1910-11.
- E. S. G. Robinson. M.A. Christ Church, Oxford. Assistant-Keeper in the Coin and Medal Department, British Museum. School Student. Admitted 1910-11.
- L. B. Tillard. B.A. St. John's College, Cambridge. Admitted 1910-11.
- A. J. Toynbee. B.A. Sometime Fellow of Balliol College, Oxford. Late Koraes Professor of Byzantine and Modern Greek Language, Literature and History at King's College, University of London. Admitted 1911-12. Re-admitted 1920-21.
- R. S. Darbishire. B.A. Balliol College, Oxford. Admitted 1911-12.
- Miss M. M. Hardie. M.A. (Mrs. F. W. Hasluck). Newnham College, Cambridge. Admitted as School Student, 1911-12.
- E. M. W. Tillyard. M.A., O.B.E. Late Fellow of Jesus College, Cambridge. Admitted 1911-12.
- M. L. W. Laistner. M.A. Jesus College, Cambridge. Reader in Ancient History in the University of London. Late Assistant Lecturer in Classics, Victoria University, Manchester. Craven Student. Admitted 1912-13. Re-admitted 1913-14 as School Student.
- S. Casson. M.A. Lincoln College, Oxford, and Senior Scholar of St. John's College. Fellow of New College. University Lecturer in Classical Archaeology. Assistant Director of the School, 1919-1922. School Student. Admitted 1912-13. Re-admitted 1913-14.
- R. S. Lambert. Repton School.

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† Killed in action, August 10th, 1915.

Gordon Leith.	Holder of Herbert Baker Studentship. Admitted 1912—13.
C. A. Scutt. M.A.	Clare College, Cambridge. Professor of Greek in the University of Melbourne, Victoria. Prendergast Student of the University of Cambridge. Admitted 1912—13. Re-admitted 1913—14.
†R. M. Heath. B.A.	Oriel College, Oxford. Craven Fellow. Admitted 1913—14.
J. Boxwell. B.A.	Scholar of Trinity College, Dublin. Travelling Scholar of Union of South Africa. Admitted 1913—14.
Miss M. N. L. Taylor (Mrs. H. C. Bradshaw.)	Newnham College, Cambridge. Admitted 1913—14.
J. Arnott Hamilton. M.A.	University of Edinburgh. Holder of the Blackie Travelling Scholarship. Admitted 1913—14.
Miss E. Radford.	Admitted 1913—14.
Miss Agnes Conway. M.B.E.	Admitted 1913—14.
Rev. W. A. Wigram. D.D.	Admitted 1913—14.
†C. B. Moss-Blundell. B.A.	New College, Oxford. School Student elect 1914—15.
H. Collingham. B.A.	Queen's College, Cambridge. Assistant Master at St. Olave's, Southwark. Craven Student. Admitted 1919—20.
M. Tierney. B.A.	University of Ireland. Professor of Antient History. University College, Dublin. Admitted 1919—20.
A. W. Lawrence.	New College, Oxford. Admitted with grant from the Craven Fund, 1919—20. Re-admitted 1921—22.
*J. B. Hutton, M.A.	Lecturer in Greek History and Archaeology at University of Glasgow. Admitted with grant from the Carnegie Trustees, 1920—21.
F. L. Lucas. B.A.	Trinity College, Cambridge. Fellow and Lecturer of King's College. School Student. Admitted 1920—21.
B. Ashmole. M.A., M.C.	Hertford College, Oxford. Director-Elect of the British School at Rome. Craven Fellow. Admitted 1920—21, 1921—22.
H. T. Wade Gery. M.A.	New College, Oxford. Fellow and Tutor of Wadham College. Admitted 1920—21, 1921—22, 1922—23.
J. J. E. Hondius. Litt.Class.Doc.	University of Utrecht, Holland. Admitted as Foreign Student 1920—21.
C. A. Boethius. Dr.Phil.	University of Upsala, Sweden. Admitted as Foreign Student 1920—21, 1921—22.
Miss L. Chandler. B.A.	University of Sheffield. Classical Mistress at the Girls' Grammar School, Leigh, Lancs. First Holder of Gustav Sachs Memorial Studentship. Admitted 1920—21.
Miss M. A. B. Herford. M.A. (Mrs. G. E. K. Braunholtz.)	University of Manchester and Somerville College, Oxford. Formerly Lecturer in Classical Archaeology and Assistant Lecturer in Classics, University of Manchester. Admitted 1920—21.

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\* Deceased.

† Killed in action, September 16th, 1916.

† Killed in action, September 26th, 1915.

Miss W. Lamb.	Newnham College, Cambridge. Hon. Keeper of the Greek and Roman Department, Fitzwilliam Museum. Admitted 1920-21, 1921-22, 1922-23, 1923-24.
M. A. Hondius-Van Haeften (Mrs. J. J. E. Hondius.)	University of Utrecht, Holland. Admitted as Foreign Student, 1920-21.
W. A. Heurtley. M.A.	Caius College, Cambridge. Diploma of Archaeology, Oxford. Assistant Director and Librarian of the School. School Student. Admitted 1921-22, 1922-23.
J. E. Hutchinson. B.A.	St. John's College, Cambridge. Craven Student. Admitted 1921-22.
J. E. Scott. M.A.	Emmanuel College, Cambridge. Fellow and Lecturer of Caius College, Cambridge. Admitted 1921-22.
E. Smith. Ph.D.	University of Christiania, Norway. Lecturer in Classics. Admitted as Foreign Student, 1921-22.
*A. Smith (Mrs. E. Smith.)	University of Christiania, Norway. Admitted as Foreign Student, 1921-22.
E. Kjelberg. Ph.D.	University of Lund, Sweden. Assistant in the National Museum, Stockholm. Admitted as Foreign Student, 1921-22.
J. Waldis. Dr. Phil.	University of Zurich, Switzerland. Professor at the Gymnasium, Lucerne. Admitted as Foreign Student, 1921-22.
G. Snijder. Ph.D.	University of Utrecht, Holland. Admitted as Foreign Student with Travelling Fellowship from his University, 1921-22.
J. Bell.	Fellow of Queen's College, Oxford. Admitted 1922-23.
*S. S. Clarke, B.A.	Balliol College, Oxford. Fellow of Exeter College. Craven Fellow. Admitted 1922-23, 1923-24.
B. L. Hallward, B.A.	King's College, Cambridge. Fellow of Peterhouse. Admitted 1922-23 as School Student.
D. C. Macgregor, M.A.	Fellow of Balliol College, Oxford. Admitted 1922-23.
Miss J. Pybus.	Newnham College, Cambridge. Senior Classical Mistress, Newcastle Central High School. Admitted 1922-23.
A. G. Russell, B.A.	University of Liverpool. Admitted as Sachs Student, 1922-23.
C. T. Seltman, B.A.	Queens' College, Cambridge, Diploma of Archaeology, Cambridge. Secretary of Cambridge Philological Society. Late George Charles Winter Warr Scholar. Prendergast Student. Admitted 1922-23.
O. J. Todd. Ph.D. (Harv.)	Associate Professor of Classics in the University of British Columbia. Admitted 1922-23.
Miss J. Webb, B.A.	University of Melbourne. Admitted 1922-23.
W. H. Alexander. M.A. (Tor.), Ph.D. (Calif.)	Professor of Classics in the University of Alberta, Canada. Admitted 1923-24.
Miss C. Brönsted.	University of Copenhagen. Admitted as Foreign Student 1923-24.

W. B. C. Buchanan, B.A.	University of Edinburgh. Admitted as holder of Blackie Travelling Scholarship, 1923—24.
C. W. M. Cox, B.A.	Balliol College, Oxford. Admitted as Craven Fellow, 1923—24.
W. L. Cuttle, B.A.	Emmanuel College, Cambridge. Admitted as Craven Student, 1923—1924.
C. Hignett, M.A.	Fellow of Hertford College, Oxford. Admitted 1923—24.
Miss M. B. Hobling, B.A.	Somerville College, Oxford. Admitted as School Student, 1923—24.
Miss V. D. Hunt, M.A.	Bedford College, London. Classical Mistress, Tiffin Girls' School, Kingston-on-Thames. Formerly Lecturer at Bedford College for Women. Admitted 1923—24.
H. H. Keen, B.A.	Balliol College, Oxford. Admitted 1923—24.
M. B. C. Tait, B.A.	Balliol College, Oxford. Admitted 1923—24.
Miss E. Tankard, B.A.	University of Liverpool. Assistant-Secretary to Institute of Archaeology, Liverpool. Admitted with grants from Holt Educational Trust and the School, 1923—24.
Miss A. Wentzel.	University of Copenhagen. Admitted as Foreign Student, 1923—24.

## ASSOCIATES OF THE SCHOOL.

Rev. A. H. Cruikshank.	Elected	1896.
Ambrose Poynter, Esq.	„	1896.
J. E. Brooks, Esq.	„	1896.
Miss Louisa Pesel.	„	1902.
J. F. Crace, Esq.	„	1902.
Miss Mona Wilson.	„	1903.
J. S. Carter, Esq.	„	1903.
B. Townsend, Esq.	„	1903.
A. M. Daniel, Esq.	„	1903.
H. W. Allen, Esq.	„	1906.
W. Miller, Esq.	„	1906.
George Kennedy, Esq.	„	1906.
A. E. Zimmern, Esq.	„	1910.
Miss Negroponte.	„	1912.
C. J. Ellingham, Esq.	„	1913.
Capt. H. M. Greaves, R.A.	„	1913.
Shirley Atchley, A.G.P.	„	1920.

# RULES AND REGULATIONS

## OF THE

# BRITISH SCHOOL AT ATHENS.

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### OBJECTS OF THE SCHOOL.

I. The first aim of the School shall be to promote the study of Greek archaeology in all its departments. Among these shall be (i) the study of Greek art and architecture in their remains of every period; (ii) the study of inscriptions; (iii) the exploration of ancient sites; (iv) the tracing of ancient roads and routes of traffic.

II. Besides being a School of Archaeology, it shall be also, in the most comprehensive sense, a School of Classical Studies. Every period of the Greek language and literature, from the earliest age to the present day, shall be considered as coming within the province of the School.

III. The School shall also be a centre at which information can be obtained and books consulted by British travellers in Greece.

IV. For these purposes a Library shall be formed, and maintained, of archaeological and other suitable books, including maps, plans, and photographs.

### THE SUBSCRIBERS.

V. The following shall be considered as Subscribers to the School:—

- (1) Donors, other than Corporate Bodies, of £10 and upwards.
- (2) Annual Subscribers of £1 and upwards during the period of their subscription.

VI. Subscribers of £2 annually or more, and Donors of £20 and upwards to the general funds of the School, shall receive a copy of the *Annual* free of charge.

Subscribers of £1 annually and Donors of £10 to the general funds shall be allowed to purchase the *Annual* at a reduced rate of £1. All Subscribers shall be entitled to receive a copy of the *Annual Report* and to use the Library and attend the public meetings of the School in Athens.

VII. A corporate body subscribing not less than £50 a year, for a term of years, shall, during that term, have the right to nominate a member of the Managing Committee.

VIII. A meeting of Subscribers shall be held in October of each year, at which each Subscriber shall have one vote. A subscribing corporate body may send a representative. At this meeting a report from the Managing Committee shall be presented, including a financial statement and selections from the reports of the Director and Students for the season. At this meeting shall also be annually elected or re-elected the Treasurer and the Secretary of the School, two Auditors, and four members of the Managing Committee, in place of those retiring under Rule XIII. (3).

IX. Special meetings of Subscribers may, if necessary, be summoned by the Managing Committee.

### THE TRUSTEES.

X. The property of the School shall be vested in three Trustees, who shall be appointed for life, except as hereinafter provided. Vacancies in the number of Trustees shall be filled up at the annual meeting of the Subscribers.

XI. In the event of a Trustee becoming unfit or incapable of acting, he may be removed from his office by a majority of three-fourths of those present at a special meeting of Subscribers summoned by the Managing Committee for that purpose, and another Trustee shall by the same majority be appointed in his place.

XII. In the event of the death or resignation of a Trustee occurring between two annual meetings, the Managing Committee shall have the power of nominating another Trustee to act in his place until the next annual meeting.

## THE MANAGING COMMITTEE.

XIII. The Managing Committee shall consist of the following :—

- (1) The Trustees of the School.
- (2) The Treasurer and Secretary of the School.
- (3) Twelve Members elected by the Subscribers at the ... of these, four shall retire in each year, at first by lot, ... Members retiring are eligible for re-election.
- (4) The members nominated by corporate bodies under Rule VI.

XIV. The Committee shall have control of all the affairs of the School, and shall decide any dispute that may arise between the Director and Students. They shall have power to deprive any Student of the use of the school-building.

XV. The Committee shall meet as a rule once in every two months; but the Secretary may, with the approval of the Chairman and Treasurer, summon a special meeting when necessary.

XVI. Due notice of every meeting shall be sent to each member of the Committee by a summons signed by the Secretary. Three members of the Committee shall be a quorum.

XVII. In case of an equality of votes, the Chairman shall have a second or casting vote.

XVIII. In the event of vacancies occurring among the officers or on the Committee between the annual elections, they may be provisionally filled up by the Committee until the next annual meeting.

## HONORARY STUDENTS, STUDENTS, AND ASSOCIATES.

XIX. The Students shall consist of the following :—

- (1) Holders of travelling ... ntships, or scholarships at any University of the ... of the British Colonies.
- (2) Travelling Students ... Academy, the Royal Institute of British Architects, the Byzantine Research and Publication Fund, or other similar bodies.
- (3) Other persons who shall satisfy the Managing Committee that they are duly qualified to be admitted to the privileges of the School.

XX. No person, other than a student of the British School at Rome, shall be admitted as a Student who does not intend to reside at least three months in Greek lands. In the case of Students of the British School at Rome, an aggregate residence of four months at the two Schools will be accepted as alternative to three months' residence in Greece.

XXI. Students attached to the School will be expected to pursue some definite course of study or research in a department of Hellenic studies, and to write in each season a report upon their work. Such reports shall be submitted to the Director, shall by him be forwarded to the Managing Committee, and may be published by the Committee if and as they think proper.

XXII. Intending Students are required to apply to the Secretary. They will be regarded as Students from the date of their admission by the Committee to the 31st day of October next following; but any Student admitted between July 1st and October 31st in any year shall continue to be regarded as a Student until October 31st of the following year.

XXIII. The Managing Committee may elect as Honorary Students of the School such persons as they may from time to time deem worthy of that distinction, and may also elect as Associates of the School any persons actively engaged in study or exploration in Greek lands.

XXIV. Honorary Students, Students, and Associates shall have a right to use the Library of the School and to attend all lectures given in connexion with the School, free of charge.

XXV. Students shall be expected to reside in the Hostel provided for them, except with the sanction of the Managing Committee. Priority of claim to accommodation in the Hostel shall be determined by the Committee.

THE DIRECTOR.

XXVI. The Director shall be appointed by the Managing Committee, on terms which shall be agreed upon at the time, for a period of not more than three years. He shall be eligible for re-election.

XXVII. He shall have possession of the school-building as a dwelling-house.

XXVIII. It shall be his duty (1) to guide and assist the studies of Students and Associates of the School, affording them all the aid in his power, and also to see that reports are duly furnished by Students, in accordance with Rule XXI., and placed in the hands of the Secretary before the end of June; (2) to assist in editing the *School Annual*.

XXIX. (a) Public Meetings of the School shall be held in Athens during the season, at which the Director and Students of the School shall read papers on some subject of study or research, and make reports on the work undertaken by the School. (b) The Director shall deliver lectures to Students of the School. At least six of such meetings and lectures shall be held in the course of each session.

XXX. He may at his discretion allow persons, not Students of the School, to use the Library and attend his lectures.

XXXI. He shall be resident at Athens from the beginning of November in each year to the end of the following June, but shall be at liberty to absent himself for short periods for purposes of exploration or research.

XXXII. At the end of each season he shall report to the Managing Committee—(i) on the studies pursued during the season by himself and by each Student; (ii) on the state of the School-premises and the repairs needed for them; (iii) on the state of the Library and the purchases of books, &c., which he may think desirable; and (iv) on any other matter affecting the interests of the School.

XXXIII. In case of misconduct the Director may be removed from his office by the Managing Committee by a majority of three-fourths of those present at a meeting specially summoned for the purpose. Of such meeting at least a fortnight's notice shall be given.

RULES FOR THE MACMILLAN HOSTEL.

XXXIV. The management of the Hostel shall be at the discretion of the Director and shall be subject to his control.

XXXV. The Director shall have power to exclude a Student from the Hostel in case of misconduct; but such exclusion must be immediately reported to the Managing Committee.

XXXVI. The Students shall, until further notice, pay a fixed charge of seventeen shillings and sixpence a week for the smaller, and twenty-five shillings a week for the larger rooms in the Hostel.<sup>1</sup> These payments shall include fire, lighting, and the necessary servants' wages.

XXXVII. Honorary Students, Associates, Members of the Committee, and ex-Directors may be admitted to residence in the Hostel. Other persons, if seriously engaged in study or research, may be admitted by the Director at his discretion. But no person shall reside in the Hostel under this rule to the exclusion of any Student desiring admission.

XXXVIII. The weekly charge for residents other than Students shall be from thirty-five to fifty-six shillings a week, or from five to eight drachmae a night.<sup>1</sup>

XXXIX. The Director shall draw up further rules for the internal management of the Hostel; such rules to be subject to the approval of the Managing Committee.

RULES FOR THE LIBRARY.

XL. The Director shall have power to make rules for the management of the Library, its use by Students, and the like; such rules to be subject to the approval of the Managing Committee.

<sup>1</sup> These rates are subject to alteration owing to the fluctuations in the exchange.

To meet the present high cost of maintenance an entrance fee of £2 2s. per Session is now payable by Students. Non-Students pay £2 2s. for any period up to three months, or £5 5s. per Session.



## PUBLICATION.

XLII. No publication whatever, respecting the work of the School, shall be made without the previous approval of the Committee.

## THE FINANCES.

XLII. All money received on behalf of the School beyond what is required for current expenses shall be invested in the names and at the discretion of the Trustees.

XLIII. The banking account of the School shall be placed in the names of the Treasurer and Secretary, who shall sign cheques jointly.

XLIV. The first claim on the revenue of the School shall be the maintenance and repair of the School-building, and the payment of rates, taxes, and insurance.

XLV. The second claim shall be the salaries of the Director and Secretary, as arranged between them and the Managing Committee.

XLVI. In case of there being a surplus, a sum shall be annually devoted to the maintenance of the Library of the School and to the publication of a report; and a fund shall be formed from which grants may be made for travelling and excavation.

*Revised, 1924.*

## MANAGING COMMITTEE, 1921-1922.

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## DIRECTOR, 1921-1922.

A. J. B. WACE, Esq., M.A., Late Fellow of Pembroke College, Cambridge.

## ASSISTANT-DIRECTOR AND LIBRARIAN, 1921-1922.

STANLEY CASSON, Esq., M.A., Fellow of New College, Oxford.

# MANAGING COMMITTEE.

487

## MANAGING COMMITTEE, 1922—1923.

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PROFESSOR PERCY GARDNER, Litt.D.	}	Appointed by the Subscribers.
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R. C. BOSANQUET, Esq., M.A. Appointed by the University of Cambridge.		
R. C. BOSANQUET, Esq., M.A. Appointed by the Hellenic Society.		
MISS C. A. HUTTON, <i>ex-officio</i> as joint editor of the <i>Annual</i> .		
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PROFESSOR A. J. TOYNBEE, B.A.		
L. WHIBLEY, Esq., M.A.		
V. W. YORKE, Esq., M.A., <i>Hon. Treasurer</i> , Farringdon Works, Shoe Lane, E.C. 4.		
M. S. THOMPSON, Esq., M.A., <i>Secretary</i> , 19, Bloomsbury Square, W.C. 1.		

## DIRECTOR, 1922—1923.

A. J. B. WACE, Esq., M.A., Late Fellow of Pembroke College, Cambridge.

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## NOTICE TO CONTRIBUTORS.

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CONTRIBUTORS to the *Annual of the British School at Athens* are requested to use the following systems of transliteration when writing in English such Greek words as have not become part of the English language:—

### ANCIENT GREEK.

#### Vowels.

- |  |  |
|--|--|
| $\left. \begin{array}{l} \alpha = a : \\ \epsilon = e : \\ \eta = \epsilon : \end{array} \right\}$ | krater, lekane.  |
| $\iota = i :$  | kalpis.  |
| $\left\{ \begin{array}{l} \circ = o : \\ \omega = o : \end{array} \right.$                         | kothon, kantharos, Amyklaion.  |
| $\upsilon = y$   | after a consonant, as aryballos, kylix; <i>u</i> after another vowel, as boule.  |
| $\alpha\iota = ai :$   | Aigion, Erythrai, except at the end of words, such as Mycenae, which are commonly Latinised in form, when <i>ae</i> may be used. |
| $\epsilon\iota = ei :$   | Meidias.   |
| $\omicron\iota = oi :$   | Chalkioikos.   |
| $\upsilon\iota = ui :$   | muia.  |
| $\alpha\upsilon = au :$  | Aulis.   |
| $\epsilon\upsilon = eu :$  | Eutychos.  |
| $\omicron\upsilon = ou :$  | boule.   |

#### Consonants.

$\beta = b$ ;  $\gamma = g$ ;  $\delta = d$ ;  $\zeta = z$ ;  $\theta = th$ ;  $\kappa = k$ <sup>1</sup>;  $\lambda = l$ ;  $\mu = m$ ;  $\nu = n$ ;  $\xi = x$ ;  
 $\pi = p$ ;  $\rho = r$ ;  $\sigma, s = s$ ;  $\tau = t$ ;  $\phi = ph$ ;  $\chi = ch$ ;  $\psi = ps$ ;  $\gamma\gamma = ng$ ;  $\gamma\kappa = nk$ ;  
 $\gamma\chi = nch$ ;  $\rho = rh$ .

<sup>1</sup>  $\kappa$  never = *c* except for place-names like Corinth, Mycenae, or some names of persons like Cleon, which have become English words.

*Accents.*

Contributors are requested to indicate accents and breathings very clearly and accurately.

MODERN GREEK.<sup>1</sup>*Vowels.*

$$\left. \begin{array}{l} \alpha = a : \\ \epsilon = e : \\ \eta = e : \\ \iota = i : \end{array} \right\} \text{ Πέντε Πηγάδια} = \text{Pénte Pegádia.}$$

$$\left\{ \begin{array}{l} \circ = o : \\ \omega \end{array} \right\} \text{ Γεώργιος} = \text{Geórgios.}$$

$v = \gamma :$  Μύλοι = Myloi. But for *av*, *ev*, *ou* see below

$\alpha\iota = \alpha i :$  Καισαριανή = Kaisariané.

$\epsilon\iota = e i :$  Ἀγία Εἰρήνη = Hagía Eiréne.

$\omicron\iota = o i :$  Μολάοι = Molaoi.

$\upsilon\iota = y i :$  Ψυχουῖος = psychoyiós.

$\omicron\upsilon = o u :$  Σκριπού = Skripoú.

$\left\{ \begin{array}{l} \alpha\upsilon \\ \epsilon\upsilon \end{array} \right\} = af \text{ and } ef \text{ before unvoiced consonants } (\theta, \kappa, (\xi, \psi), \pi, \varsigma, \tau, \phi, \chi) \text{ and}$   
*av*, *ev* before vowels and voiced consonants; Εὐθύμιος =  
 Efthýmios; Λάυρα = Lávra.

*Consonants.*

$\beta = v ; \gamma = g$ , but  $\gamma\gamma, \gamma\kappa$  and  $\gamma\chi$  as *ng*, *nk* and *nch*;  $\delta = d ; \zeta = z ; \theta = th ;$   
 $\kappa = k ; \lambda = l ; \mu = m ; \nu = n ; \xi = x ; \pi = p ; \rho = r ; \rho\rho = rrh ; \acute{\rho} = rh ; \sigma, \varsigma = s ;$   
 $\tau = t ; \phi, \chi, \psi = ph, ch, ps$ .<sup>2</sup>

The rough breathing to be written *h* : Ἁγίος Γεώργιος = H. Geórgios.

*Accents.*

Accents, in all cases to be written as acute, to be indicated.

In any case where the Greek form of the word is felt to be obscured it may be added in Greek letters (in brackets) the first time a word occurs, and conversely the exact pronunciation, if it should be of importance for any reason, may be specially indicated.

<sup>1</sup> See Mr. R. M. Dawkins' paper on 'The Transliteration of Modern Greek' in *B.S.A.*, vol. xv.

<sup>2</sup> Such combinations as  $\mu\pi$  are best represented by the corresponding sound.—[Ed.]

## ABBREVIATIONS, ETC.

For the conventions respecting the indication of quotations from ancient and modern authorities, titles of periodical and collective publications, transliteration of inscriptions, and quotations from MSS. and literary texts, contributors are referred to the accompanying notes drawn up by the Editors of the *Journal of Hellenic Studies* and kindly placed by them at the disposal of contributors to the *Annual*.

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*Quotations from Ancient and Modern Authorities.*

Names of authors should not be underlined; titles of books, articles, periodicals, or other collective publications should be underlined (for italics). If the title of an article is quoted as well as the publication in which it is contained, the latter should be bracketed. Thus :

Six, *Jahrb.* xviii. 1903, p. 34,

or—

Six, *Protopogenes* (*Jahrb.* xviii. 1903), p. 34.

But as a rule the shorter form of citation is to be preferred.

The number of the edition, when necessary, should be indicated by a small figure above the line; e. g. Dittenb. *Syll.*<sup>3</sup> 123.

*Titles of Periodical and Collective Publications.*

The following abbreviations are suggested, as already in more or less general use. In other cases, no abbreviation which is not readily identified should be employed.

*A.-E.M.* = Archäologisch-epigraphische Mitteilungen.

*Ann. d. I.* = Annali dell' Istituto.

*Arch. Anz.* = Archäologischer Anzeiger (Beiblatt zum Jahrbuch).

*Arch. Zeit.* = Archäologische Zeitung.

*Ath. Mitt.* = Mitteilungen des Deutschen Arch. Inst., Athenische Abteilung.

Baumeister = Baumeister, Denkmäler des klassischen Altertums.

*B.C.H.* = Bulletin de Correspondance Hellénique.

*Berl. Vas.* = Furtwängler, Beschreibung der Vasensammlung zu Berlin.

- B.M. Bronzes* = British Museum Catalogue of Bronzes.  
*B.M. Coins* = British Museum Catalogue of Greek Coins.  
*B.M. Rings* = British Museum Catalogue of Finger-Rings.  
*B.M. Inscr.* = Greek Inscriptions in the British Museum.  
*B.M. Jewellery* = British Museum Catalogue of Jewellery.  
*B.M. Sculpt.* = British Museum Catalogue of Sculpture.  
*B.M. Terracottas* = British Museum Catalogue of Terracottas.  
*B.M. Vases* = British Museum Catalogue of Vases, 1893, etc.  
*B.S.A.* = Annual of the British School at Athens.  
*B.S.R.* = Papers of the British School at Rome.  
*Bull. d. I.* = Bullettino dell' Istituto.  
*Busolt* = Busolt, Griechische Geschichte.  
*C.I.G.* = Corpus Inscriptionum Graecarum.  
*C.I.L.* = Corpus Inscriptionum Latinarum.  
*Cl. Rev.* = Classical Review.  
*C.R. Acad. Inscr.* = Comptes rendus de l'Académie des Inscriptions.  
*C.R. St. Pétr.* = Compte rendu de la Commission de St. Pétersbourg.  
*Dar.-Sagl.* = Daremberg-Saglio, Dictionnaire des Antiquités.  
*Dittenb. O.G.I.* = Dittenberger, Orientis Graeci Inscriptiones Selectae.  
*Dittenb. Syll.* = Dittenberger, Sylloge Inscriptionum Graecarum.  
*'Αρχ. 'Εφ.* = 'Αρχαιολογική 'Εφημερίς.  
*G.D.I.* = Collitz, Sammlung der Griechischen Dialekt-Inschriften (or Collitz-Bechtel).  
*Gerh. A.V.* = Gerhard, Auserlesene Vasenbilder.  
*G.G.A.* = Göttingensche Gelehrte Anzeigen.  
*Head, H.N.<sup>2</sup>* = Head, Historia Numorum. Revised Edition, 1910.  
*I.G.* = Inscriptiones Graecae.<sup>1</sup>  
*I.G.A.* = Röhl, Inscriptiones Graecae antiquissimae.  
*Jahrb.* = Jahrbuch des Deutschen Archäologischen Instituts.  
*Jahresh.* = Jahreshefte des Oesterreichischen Archäologischen Instituts.  
*J.H.S.* = Journal of Hellenic Studies.  
*Klio* = Klio (Beiträge zur alten Geschichte).  
*Le Bas-Wadd.* = Le Bas-Waddington, Voyage Archéologique.  
*Liverpool Annals* = Annals of Archaeology and Anthropology of University of Liverpool.  
*Michel* = Michel, Recueil d'Inscriptions grecques.  
*Mon. d. I.* = Monumenti dell' Istituto.  
*Müller-Wies.* = Müller-Wieseler, Denkmäler der alten Kunst.  
*Mus. Marbles.* = Collection of Ancient Marbles in the British Museum.

<sup>1</sup> The attention of contributors is called to the fact that the titles of the volumes of the second issue of the Corpus of Greek Inscriptions, published by the Prussian Academy, have now been changed, as follows :—

- I.G.* I. = Inscr. Atticae anno Euclidis vetustiores.  
 „ II. = „ „ aetatis quae est inter Eucl. ann. et Augusti tempora.  
 „ III. = „ „ aetatis Romanae.  
 „ IV. = „ Argolidis.  
 „ VII. = „ Megaridis et Boeotiae.  
 „ IX. = „ Graeciae Septentrionalis.  
 „ XII. = „ Insul. Maris Aegaei praeter Delum.  
 „ XIV. = „ Italiae et Siciliae.

*Neue Jahrb. kl. Alt.* = Neue Jahrbücher für das klassische Altertum.

*Neue Jahrb. Phil.* = Neue Jahrbücher für Philologie.

Niese = Niese, Geschichte der griechischen u. makedonischen Staaten.

*Num. Chr.* = Numismatic Chronicle.

*Num. Zeit.* = Numismatische Zeitschrift.

Pauly-Wissowa = Pauly-Wissowa, Real-Encyclopädie der classischen Altertumswissenschaft.

*Philol.* = Philologus.

Ramsay, *C.B.* = Ramsay, Cities and Bishoprics of Phrygia.

Ramsay, *Hist. Geog.* = Ramsay, Historical Geography of Asia Minor.

Reinach, *Rép. Sculpt.* = S. Reinach, Répertoire des Sculptures.

Reinach, *Rép. Vases* = S. Reinach, Répertoire des Vases peints.

*Rev. Arch.* = Revue Archéologique.

*Rev. Ét. Gr.* = Revue des Études Grecques.

*Rev. Num.* = Revue Numismatique.

*Rev. Philol.* = Revue de Philologie.

*Rh. Mus.* = Rheinisches Museum.

*Röm. Mitt.* = Mitteilungen des Deutschen Archäologischen Instituts, Römische Abteilung.

Roscher = Roscher, Lexicon der Mythologie.

*S.M.C.* = Sparta Museum Catalogue.

*T.A.M.* = Tituli Asiae Minoris.

*Z.f.N.* = Zeitschrift für Numismatik.

### *Transliteration of Inscriptions.*

[ ] Square brackets to indicate additions, *i. e.* a lacuna filled by conjecture.

( ) Curved brackets to indicate alterations, *i. e.* (1) the resolution of an abbreviation or symbol; (2) letters misrepresented by the engraver; (3) letters wrongly omitted by the engraver; (4) mistakes of the copyist.

< > Angular brackets to indicate omissions, *i. e.* to enclose superfluous letters appearing on the original.

. . . Dots to represent an unfilled lacuna when the exact number of missing letters is known.

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Uncertain letters should have dots under them.

Where the original has iota adscript, it should be reproduced in that form; otherwise it should be supplied as subscript.

The aspirate, if it appears on the original, should be represented by a special sign <sup>h</sup>.

*Quotations from MSS. and Literary Texts.*

The same conventions should be employed for this purpose as for inscriptions, with the following *important exceptions*.

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## British School at Athens.

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Donations or annual subscriptions to the School are much needed, and will be gladly received. They should be sent to the Hon. Treasurer, V. W. YORKE, Esq., M.A., Farringdon Works, Shoe Lane, E.C. 4.

<sup>1</sup> In the case of Students of the British School at Rome, an aggregate residence of four months at the two Schools will be accepted as alternative to three months' residence at the School at Athens.

## INDEX

- ACHAEAN LEAGUE, wars of, with Sparta 417; with Argos, 417, 423; alliance of, with Rome, 423
- Acropolis of Mycenae, walls of, direction of, 61, 245; date of, 246, fixed by pottery found, 106, 109; conglomerate tower on, 245, date of, *ibid.*
- Acroteria, poros, 420
- Aegisthus, Tomb of, position of, 296; discovered by Tsountas, *ibid.*; date of, 300, 306, 312, 316, 391. *Dromos*, construction of, 297; drain in, 297 f.; floor of, 298. *Doorway*, original, of rubble masonry, 298; dimensions, 298, 299; lintel-blocks short, without relieving triangle, 298; later façade faced poros in ashlar masonry, 300; date, 392. *Tholos*, faced rubble masonry, 300, 301; method of construction of walls, 301; grave-pit inside doorway, 301; *Find*s: miscellaneous, 303, 304, 305, 315 f.; pottery, 312, 313 ff. See also *Tholos Tombs*.
- Ἀγιάδα, 412
- Alabaster cup, from Thera, 1; imitation of, in clay, *ibid.*; vases, 336, 356, 367
- Ἀλκίνα, 405, 411 f., 425, 427; τέλεα, date of, at Mycenae
- Altar of cyclopean masonry, above Fourth Shaft Grave, 112, 113; level of, 113. Stucco, painted, 154, 224 f.; shape and decoration of, 425
- Amber beads, 304, 364
- Amphorae, Palace Style of, 71, 83, 295, 296, 302, 323, 324, 329, 344, 365, 386, 387; characteristic of L.H. II. period, 71, 324; importance of, for dating, 324; long continuance of style, *ibid.*; evolution and degeneration of, 324, 374. Rhodian wine jar handles, stamped, 71. See also under Pottery.
- Antelope (?) on Grave-Circle stele, 427
- Argive, dialect forms (late), 411, 412, 413; Heraion tholos tomb, 330 ff.; κῶμαι, 426 ff.; phatrai, 426, 427
- Argonauts, on painted step, 172
- Aristippus, tyrant of Argos, 423
- Arneios, month of, 412, 425, 427
- Arrow-heads, bronze, 71, 78, 334; flint, 224; iron, 34; obsidian, 224, 304
- Ashlar masonry: in conglomerate, 13, 17; hammer-dressed, 10, 17; sawn, *ibid.*; in poros for facing, 233, 300; later than rubble masonry, 319, 388. Relative dates of, in Crete and in Mycenae, 392
- Asine, walls of, 17, date of, *ibid.*; evidence from, for Mycenae, *ibid.*
- Athena, head of, on coin of Heraea, 304
- Atreus, Treasury of, 338 ff.; previous excavations of, 338; date of, 352, 391. *Dromos*, dimensions and construction of, 338, 339; floor of, 339; site terraced, 340; ashlar masonry hammer-dressed, 342. *Façade*, decoration of, 342 f., 344, 345; stone sawn, 342. *Doorway*, lintel with relieving triangle, 342, construction of, 346; double door, 347; pavement, *ibid.* *Threshold*, wedge construction of, 347 f.; overlaid bronze, *ibid.*; L.H. III. yellow clay mortar, 349; finds below, 348, 349. *Tholos*, dimensions, 349; construction and decoration, 350. Side-chamber in, 350 f.; use of, 351; parallels to, *ibid.* *Find*s, by Stamatakes, 353 ff.; by B.S.A., 356 f. See also *Tholos Tombs*.
- Awl, bone, 48, 305
- Axe, double, bronze, 260; steatite, 337
- BARLEY, carbonised, 49
- Bath, terracotta: used as coffin, 36; Greek types of, 69; Hellenistic, 99
- Bath, the red. See under Palace.
- Bath rooms, Hellenistic, 98, 99
- Bead necklaces represented in frescoes, 167
- Beads: agate, 26; amber, 304; amethyst, 363; bone, 149; carnelian, 224, 304, 355, 357, 372; crystal, 48, 54; glass, 291; glass paste, 1, 26, 48, 354, 357, 363, 371, 372, 382, 383; gold, 334, 335,

- 354, 372, 373; lapis lazuli, 54, 84; onyx, 54; paste, 48, 80; terracotta, 385  
 Boar's tusks, 26, 56, 337, 356; sawn, 303; attached to helmets, 225; represented on stucco altar, *ibid.*  
 Bone, awl, 31, 48, 335; disc, 26, 54; pin, 54; spool, 54; worked, 26  
 Bones, animal (kitchen refuse), 157, 173, 174, 178, 181, 264  
 Bowl, steatite, 336; stone, 26  
 Brick, crude, 24, 55, 87, 88, 240, 260  
 Bronze, arrow-head, 71, 534; band, 224; boss, 71; coins, 304, 305; cup, 386; dart, 355; disc, 332; double-axe, 260; ear-ring, 39; handle, 71, 335; knife, 219, 290; knob of door-pivot, 233; mirrors, 369 ff.; nails, 356, covered gold foil, *ibid.*; plating, 48, 244, 364; pot, 260; rings, 34, 37, 54, 291, 355; rivets, 220, 334; rosettes, 356; slag, 37; stud, 291  
 Bucranium, steatite pendant, 54  
 CANVAS, carbonised, 55  
 Carbonisation of human remains in grave-pits, 333  
 Carnelian, beads, 224, 304, 355, 357, 372  
 Castle, Mycenaean, on fresco, 250  
 Ceiling, Mycenaean method of construction, 90, 231, 232  
 Celt, 315, 368; hammer-, 353  
 Cement, basins, 420; floor, 149, 192, 226; pavement, 223; roadway, 210. Stucco used as, to point ashlar masonry, 300.  
 Cemetery, Early Cycladic in Syra, 393. Middle Helladic at Mycenae, 11, 95; extent of, 118; position influenced by nature of rock, 11, 118; graves under Ramp and South Houses, 118; within Grave Circle, 118, 119; reserved for royal tombs, 119; built on after enclosure of royal graves, 125; abandoned, 120. Hellenistic, cist and shaft graves in, 421; date of, *ibid.*; finds from, *ibid.* Kalkani, 4, 328  
 Chamber tombs, Cycladic, relation of, to Early Minoan tholoi, 393  
 Chariot, on fresco frieze, 164 f.; on grave-stele, 125, 131, 132; four-wheeled (?), 138  
 Cist graves, Hellenistic, 421; Middle Helladic, 78, 125  
 Cistern, 262; secret, 347  
 Clay, ceiling, 231, 232; disc, 24; floor, 226; loom-weights, 39, 315, 316; plaster, 49, 50, 156, 195, 222; slab, 47; spools, 39, 54, 338; spindle-whorls, 2, 149, 182, 366; yellow, used as mortar in L.H. III. period, 17, 297, 348  
 Cleomenes of Sparta, 417, 423  
 Clytemnestra, Tomb of, 357 ff. Previous excavations of, 357; repairs to, *ibid.*; date of, 374, 376, 391. *Dromos*, dimensions and construction of, 358; hammer-dressed ashlar of, *ibid.*; grave-pit in, *ibid.* *Façade*, construction and decoration of, 359; gypsum half-columns in, *ibid.*; relieving triangle above lintel masked, 360. *Doorway*, dimensions of, 360; door in, 361; threshold of, wedge-construction of sawn conglomerate, 361; sheathed in bronze, *ibid.*; blocked by wall, *ibid.* *Tholos*, dimensions of, 362; scientific construction of lining-wall, *ibid.*; drain from, 363; covered earth mound, *ibid.* *Finds*, by Mrs. Schliemann, 363 ff.; in 1913, 366 f.; by Tsountas, 368; by B.S.A., 374. Hellenistic Theatre above, 418 f. See also under Tholos Tombs.  
 Cockle-shell, glass paste, 355, 356  
 Coins, bronze of Heraea, 4th cent. B.C., 304; miscellaneous, 39, 305  
 Colonnaded hall, evidence for, 231  
 Columns, proportion of height to diameter, at Knossos, 278, at Mycenae, 233, 278, 279; evidence from height of doorways, 279, 280. Gypsum, 359, 360, 367; wooden, 152, 157. Half-columns, gypsum, 359; of green marble, 342. Bases, conglomerate, 201, 211, 213; with fragments of bronze plating, 244; from foundations of Doric temple, Propylon and Megaron, 271; rectangular shape of, 232, 244; relation of, to height of column, 231, 233, 279, 280. Doric column shaft, Hellenistic, 37  
 Conglomerate, use of, in building, 11, 12, 17, 18 note 1; splits into natural slabs, 289; sawn blocks, value of, as evidence of date, 180, 247, 340; column bases, 201, 211, 213, 231, 244, 271; thresholds, 179, 180, 186, 206, 208, 217, 223, 237, 247, 340  
 Cooking-pots, three-legged, 172  
 Curled-leaf ornament, 55, 397 ff.; moulds for making in glass paste, 398, 399; common on mainland, 398; date of,

- 398, 399. Glass paste covered gold foil, 55, 400 f.; gold, 399; ivory, 398, 399; degeneration of technique and types, 401
- Cycladic, early cemeteries in Syra, 393.
- Matt-painted pottery, characteristics of, 141, 142
- Cyclopiian Terrace Building, position of, 403, 407; plan of, 403, 404; purpose of, 407; date, *ibid.* Burials in, 406 f. *Finds*, pottery from, 405, 407; pithos, 406
- Cyclopean Tomb, 287 ff., position of, 287; excavated by Tsountas, *ibid.*; date of, 292, 391; plan of, 288. *Dromos*, construction of, 289. *Doorway*, dimensions and cyclopean construction of, 289; short lintel-blocks of undressed conglomerate without relieving triangle, *ibid.*, method of transport of, *ibid.* *Tholos*, dimensions and construction of, 290. *Finds*, by Tsountas, 290 f.; by B.S.A., 291 f. See also under Tholos Tombs.
- Cyclopean Walls, Mycenaean method of bedding, 105; relation of, to ashlar work, 18, note 1.
- Cypress (?) post, carbonised remains of, 257
- ΔΑΜΙΟΠΡΟΪ of Mycenae, 412, 427
- Damokleidas, honoured by Mycenaeans, 408, 413, 425; services of, 425
- Discs, clay (chipped potsherds), 24, 386; gold, 374; lead, 224; stone, 1, 26, 54
- Δόκημα, Argive use of, for δόγμα, 414
- Door frames, wooden, 88
- Doors, double, of Lion Gate, 13. Position of, in Lion Tomb, 389; in tombs of Second Group, 390
- Doric capital and column shaft, Hellenistic, 37
- Doric temple, remains of, 147, 158, 208, 221, 228, 229, 231; orientation of, 229; date of construction of, 245, 417; not destroyed at sack of Mycenae by Argives, 414; inscriptions set up in, *ibid.*
- Drainage system, 62
- Drains, Mycenaean methods of construction: roofed with slabs, 78, 201, 181, 187; with tiles, 187. Under South House, 96; in Court of Megaron, 201, 202; in N.W. Propylon, 212. Hellenistic, construction of, 151
- Drill, tubular, use of, in Mycenaean stonework, 16, 344
- EARLY HELLADIC Period, date, 114.
- Pottery, see under Pottery
- Earring, bronze, 39
- Egyptian influence in designs on Mycenaean grave stelai, 181
- Epano Phournos Tomb, 292 ff.; excavated by Tsountas, 392; position of, *ibid.*; date of, 392; plan of, *ibid.* *Dromos*, dimensions and construction of, 292. *Doorway*, dimensions and cyclopean construction, 292 f., 294; short lintel blocks of undressed conglomerate, 294. *Tholos*, walls constructed of limestone slabs, 294. Close correspondence of, with Cyclopean Tomb, 292. *Finds*, 294. See also under Tholos Tombs.
- Ephyraean ware, 23, 79, 82, 83, 320, 329, 356, 374; characteristic of L.H. II. period, 310, 324, 329
- Ἐπιμέλεσθαι, with infinitive, 409, 415
- FAIENCE, blue bowl, 336; date of, 336, 387, note 4
- Fan-shaped ornament, gilt bronze, 385; gold, *ibid.*; lapis lazuli, 385; terracotta, 384. Favourite design throughout L.H. period, 385
- Flamininus, campaign of, against Sparta, 423 f.; policy of, 425
- Flint, arrow-heads, 224; saw, 80
- Floors, cement, 149, 192, 226; clay, 74, 90, 280; gypsum slabs, 240; stucco, 147, 187, 192, 193, 240
- Fresco, fragments of, unburnt, from Ramp House, 79, 80; East Lobby of Palace, 159; Pithos Area, 163 ff., 188. W. Portal, 162, 210; Megaron, 214 f., 237, 249 f.; under Doric temple, 231. *Subjects* Frieze with chariot and horses, 164 f.; date of, 165; female figures, 166 ff.; date of, 166; high building with female figures, 249 ff.; battle scene, 252; spiral designs, 167 f., 170; marbling, 171. Rodenwaldt's publications of frescoes, 164 ff., 250 ff. Discussions of dates, 80, 159, 163, 164, 166, 169, 215, 254, 255
- GENII, pouring libations, on blue glass paste plaque, 379; origin of type, 380; parallels to, *ibid.*; date, *ibid.*
- Genii, Tomb of, 376 ff.; discovered by Tsountas, 376; perfect condition of, *ibid.*; date, 379, 387, 391. *Dromos*,

- dimensions of, 376; construction of walls, 376. *Façade*, sawn blocks of conglomerate, 377, 378; two lintel blocks with masked relieving triangle, 378. *Doorway*, ashlar masonry pointed with stucco, *ibid.*; double doors, *ibid.*; threshold of wedge construction sheathed wood or copper, *ibid.* *Tholos*, dimensions and construction, 378, 379; grave-pits in, 379.  *Finds*, by Tsountas, 379 ff.; by B.S.A. 386. See also under Tholos Tombs.
- Geometric pottery. See under Pottery.
- Glass paste, 56, 59, 354, 355; cockle-shell, 356, 358; disc, 55; ornaments, 336, 337, 355; 398, 399, curled leaf; pendant, 55; plaques, 379, 383
- Gold, beads, 304, 334, 335; disc, 374; foil, 224, 304, 305, 334, 335, 338, 353, 354, 357, 380; leaf, 348, 353, 354, 372, 373; nails, 382; ring, 54; rosettes, 56, 334; studs, 304
- Grain, carbonised, 49, 55
- Granary, description and plan of, 39 ff.; reason for name, 59 f.; date of construction, 58, 60 ff.; destruction of, by fire, 48, 51. Corridors, 38 ff.; staircase; 41 f.; West and East Basements, 45 ff. Shaft Graves in, 55 ff., 120; finds from, 56 f.; date of, 58, 59, 120.  *Finds* from side of, 39 f., 43 f., 47, 51 ff., 57
- Granary Class of L.H. III. pottery, 40, 41
- Grave Circle, 103 ff. Excavations by Schliemann, 103, 104; by Keramopoulos, 105; by Stamatakes, 103; by Tsountas; by Karo, 104, by B.S.A. 105 f. Date of construction, 122, 249; purpose of, 119, 122; method of, 106, 111, 112, 122; alterations of level on, 123; reserved for royal interments, 119. Pottery finds as evidence of date, 104, 105, 106 ff. Subsequent history of site, 125 f.
- Graves, Middle Helladic, in Ramp House, 76; in South House, 76, 94; Grave Circle, 76, 95. Cist, for private individual 78, 125; shaft, for royal persons, 78, 125
- Gymnasium, Hellenistic, position and plan of, 420; finds from, *ibid.*; cement-lined basins in, *ibid.*
- Gypsum, imported from Crete, 232, 392; carved, 366; pavement slabs, 232, 238, 240
- HAGIOS ELIAS, Mt., 4, 429 f.; Plan and report on remains by Steffen, 431 f.; his theory of, 432. Excavations: by Schliemann, 431; finds by, *ibid.*; by B.S.A., 429, 433 f. Date of walls, 433; doorway in, 433, 434; remains of Mycenaean fort, 432, 434
- Hearth, movable, introduced from Crete, 241. Painted stucco, in Megaron, 241; dimensions, construction and designs, 241, 242, 243; columns round, 243; pottery under, 243; date of, 243, 244
- Hellenistic, bath, 99 and note 1: bath-room, 98; arrangements of, 98, 99. Column shaft and capital, 37: graves, 421: inscriptions, 70, 408, 414; remains, 68 f., 85, 97 ff., 103, 415, 423: theatre, 418 ff. See also under Pottery.
- Helmet, decorated with boar's tusks, 27; representation of, on painted altar, 225
- Heraion Tomb, 330 ff.; found by Stamatakes, 330; date of, 332, 388; relation of, to Mycenaean tholoi, 332. *Dromos*, length of, 330; walls and blocking wall of rubble, ending in ashlar masonry at doorway, *ibid.* *Doorway*, size and construction, 330, blocked by wall, *ibid.*; lintel of hammer-dressed conglomerate, 332. *Tholos*, dimensions and construction of, 332, 333; grave-pits in, 333.  *Finds* by Stamatakes, 334 ff. See also under Tholos Tombs.
- Horn, cut into boar's tusk shape, 56
- Horse, in chariot, 128, 131, 132; unharnessed 132, 133
- House of Warrior Vase, plan and position of, 84 ff.; excavated by Schliemann, 84; well shafts in, 85, 86; character of finds, *ibid.*; date of, 85
- INGOT, copper, from W. Terrace of Palace, 210; shape resembles ox-hide, *ibid.*; parallels to, from Crete, *ibid.*
- Interments secondary, in Mycenaean graves, 121, 328, 354, 368
- Inscriptions, late Greek from Lion Gate, 11. Hellenistic, from Ramp House, 408 ff.; text of, 410 f.; dialect, 411; date of, 410 f., 425, 426: I.G. iv., 497, from Tsountas' House, 414, date, 424, 427: I.G. iv., 498, from summit of Acropolis, 414: from Shrine of Perseus, 420, 422: on roof-tile, 337

- Iron, arrow-head; cone (?) 39; key, 101; nails, 71; pin, 312, 421; ring, 421; rod, 39; spear-head, 71; strigil, 312
- Ivory, button, 386; fragments, 303, 337, 357; handles, 385, carved mirror, 369; relief of lions, 303; rod, 291; wing, inlaid blue paste, 371
- KALKANI, excavations in cemetery at, 4; contemporary with Cretan at Zafer Papoura, 328
- Kato Phournos, Tomb of, 320 ff., excavated by Tsountas, 320; position of, *ibid.*; date of, 324. *Dromos*, dimensions of, 320, 322; lined hammer-dressed ashlar masonry, 322; blocked by wall, *ibid.* *Doorway* and façade of, 322; threshold covered cement, *ibid.* *Tholos*, dimensions and construction of, *ibid.* *Finds*, 324
- Kitchen refuse, 199, 202
- Knife, bronze, 219; obsidian, 118
- Κοινόν, τό, the citizens of Argive κῶμα, 413
- Κῶμαι, Argive, no official division into, 426; inhabitants members of phatral, 426, 429; local self-government, powers of, 427, 428
- Kotselles, 48, 91; modern use of, 48
- Κυκλ. T., Stamatakes' finds in Grave Circle inscribed, 114 note 4
- LABEL (?) terracotta, 31
- Lamps, marble, of L.H. II. type, 329; steatite, of L.H. II. type, 386; terracotta (Greek), 69, 312, 337, 405 (inscribed)
- Lapis lazuli, beads, 54; inlaid on gold nail, 382; pendant, 372
- Late Helladic Period: I., date of, 391; Shaft Grave dynasty, 121, 391; construction of First Palace, 203; construction of six Shaft Graves, 120; earliest Tholos Tombs, 120, 391. II., date, 332, 392; change of dynasty, 120, 391; second group of Tholos Tombs, 391; inhabited First Palace, 203. III., date, 122, 374, 391. Tholos Tomb Dynasty, 391; period of great building activity (Lion Gate, Walls, Second Palace, Third Group of Tholos Tombs), 122, 203, 268, 352, 391; destruction of Mycenae, 269. For Pottery, see under Pottery.
- Lead, disc, 224; figurine of woman, 364; fragments of, 37, 54, 71; rivets, 39, 68, 356; vessels, 56, wire, 386
- Leukas, enclosed cist graves at, 124 f.; three groups of, 124; chronological sequence of, *ibid.*; connection with Mycenaean tholoi, *ibid.*
- Lily-bud ornament, 383
- Limestone, outcrop on upper part of Acropolis, 118; shelly, slabs of, 111, 112; slab covered red stucco, 224
- Lintel, construction of, in Lion Gate, 14, 15; in first group of Tholos Tombs, 289, 294, 298; in second group, 318, 322, 325, 332; in third group, 346, 360, 378. Inner block larger than outer, 347.
- Lion (?) terracotta, 102
- Lion Gate, 9 ff.; approach to, 9, 10; fortifications of, 12 f.; comparison of, with Tiryns Gate, 12 f.; construction of, 13 f.; lintel of, 14, 15; wooden roof to, 17. Lion relief, 15 f. Stratification of debris at, 20; finds from, 20 ff. Date of, 352
- Lion relief, construction of, 15 f.; technique of, 16; symbolism of, *ibid.*
- Lion Tomb, 325 f.; plan of, Pl. LIII.; excavated by Tsountas, 325. Date of, 329, 352. *Dromos*, lined ashlar masonry, 325; blocked by cross-wall, *ibid.* *Doorway*, dimensions and construction of, 325; joints pointed with stucco, *ibid.*; pivot holes for door in lintel-block, *ibid.*; position of threshold, *ibid.*; façade veneered with poros, 326. *Tholos*, dimensions and construction of, 326; grave-pits in, 328. *Finds*, 329
- Loom-weights, clay, 37, 39, 54, 101, 215, 315; with stamped decoration, 65, 316; inscribed, 11, 102
- MARBLE, green, half-columns from Treasury of Atreus, 342; red, frieze on façade of *do.*, 344; white, lamp of L.H. II. type, 329
- Masonry, *Ashlar*, first appearance of, in L.H. II., in Tholos Tombs, 300, 392; in poros first, in Second Group, 300, 318, 322, 325, 388, 392; all conglomerate hammer-dressed, 318, 322, 325, 332; in conglomerate, in L.H. III. in Third Group, 342, 361, 376, 389, 392; sawn conglomerate characteristic of L.H. III. period, at Tiryns and Mycenae, 390. *Cyclopean*, Mycenaean method of bedding walls, 105 f.; Ashlar and Cyclopean in use at same time, 18, note 1. *Rubble*, of

- limestone in First Group of Tombs, in L.H. I., 391
- Mathi spring at N. foot of Mt. H. Elias, 432, 433
- Matt-painted ware (M.H.). See under Pottery.
- Megaron, Mycenaean innovation, 247, 248, 256; correspondence between megara at Mycenae and Tiryns, 247. Problems of construction; number of storeys, 90, 91, 256, 276 f., 281; height, 257, 277 f., 280; lighting, 256, 257, 276; roofing, 276, 277
- Middle Helladic Period, date of, 305; cemetery on Acropolis, 95, 118; Sixth Shaft Grave belongs to, 125. Introduction of Minoan civilisation into Mycenae, 125. Pottery. See under Pottery.
- Minoan religion, adopted by Mycenaean, 16, 121, 368; sacred character of Kings, 121; cult of Shaft Grave dynasty, 121, 122; burial customs not adopted, 368
- Minyan Ware (M.H.). See under Pottery.
- Mirror, bronze, 369; carved ivory handles of, *ibid.*; design of, *ibid.*; parallels to, from Cyprus, *ibid.*; date of appearance at Mycenae, 370, 371.
- Mortar, stone, three-legged, 1, 91, 368
- Mortar, yellow clay used as, in L.H. III. period, 17, 297
- MYPTOYE inscribed on loom-weight, 102
- Mother-goddess, worship of, 16; representations of, on ornament, 402
- Murex-pattern on L.H. III. kylix, 138
- Mycenae: *Prehistoric*. Inhabited early in Bronze Age by makers of E.H. ware, 66, 114, 116; date of settlement, 114; extent of, 117. History of, in M.H. period, 117, 119; date of, 119; flourishing town during, 119, 305. In L.H. I., II. period, 120, 121; date of, 120; Artistic influences in, 145; Shaft Grave dynasty, 119, 268, 269; Tholos Tomb dynasty, buildings of, 268, 269. In L.H. III. Prosperity of, 122; destruction of, 30, 125, 245, 246, 415. *Classical*. Construction of Doric temple, walls of lower town, etc., date of, 417; ally of Sparta, took part in Persian war, 422; captured by Argives, 5th cent. B.C., 415 and note 1; site unoccupied until Hellenistic Age (3rd cent. B.C.), 422; flourishing Hellenistic village, 428; remains of, 415, 416, 417; fortified *κῆμα* of Argos, 417; made over with Argos to Nabis of Sparta by Philip of Macedon, 198, B.C., 423; liberated by Flamininus, 424. Site described as deserted by Pausanias in 2nd cent. A.D., 428
- Mycenaean, burial customs, 328; adaptation of Egyptian designs, 131; of Cycladic *do.*, 141, 144; of Cretan, 145; independent character of art, 146, 349. Phoenician adaptation of Mycenaean design, 251, note 2
- NABIS, King of Sparta, relations of, with Mycenae, 417, 423 ff.
- Nails, bronze, 347, 348, 350. Gold inlaid lapis lazuli, 382; from Phaistos, 382, note 1
- Nauplia Museum, finds from Mycenae in, 5, 21, 114, 115, 164, 409
- Necklace, representation of bead, on fresco, 167
- Nicks, in large blocks to facilitate transport, 318, 343
- OBSIDIAN, 64 and note 3, 224, 291, 304, 335
- Oleander leaves, impressions of, on clay ceiling, 90
- Olive press, Hellenistic, 70, 210; olive kernels, carbonised, 48, 86
- Orientalising ware. See under Pottery.
- Ox-head, modelled on handle of Granary Class L.H. III. jar, 42
- Oyster-shells (kitchen refuse), 157, 173, 178, 181, 264
- PALACE, previous excavations at, 147. Two types of buildings in, 270; M.H. curvilinear, 270; square-planned Cretan, *ibid.*; date of change, 270, 271. *First Palace*: position of, 197, 203, 247, 249, 263, 265; date of, 208, 221, 248, 261, 265, 269. *Second Palace*: first phase of, 203 f.; date of, 122, 228, 261; position of, *ibid.*; second phase of, 122, 204, 261, 265, 269; position of, 263; architectural skill in planning, 263, 267, 270; date of, 186, 245, 261, 265, 268 f.; comparison of, with Tiryns, 267; importation of design from Crete, 267, 268. Chronological arrangement of various parts, 268, 281 f.

PALACE (*continued*)—

*Staircase*: *West Lobby*. Description of, 149, 152; finds from, 150 f.; *Central do.* Plan of, 154; finds from, 154, 155; date of, 155. *East do.* Plan and construction of, 155 f.; pottery from, 157 f.; fresco from, 159. *Stairs*. Plan and reconstruction of, 153, 159 f.; date of, 151, 155.

*Pithos Area*. Position of, 160, 161; name of, 161; fresco from, 162 ff.; pottery from, 172 ff.; date of, 178

*Anteroom and Pillar Basement*. Position of, 179 ff.; red sandstone threshold in anteroom, 180; drain in *do.*, 181. Pillar of rubble masonry, 181, 275; deposit in basement, 182, 183; drain in, 183; walls in, 184; date, 185, 186; importance of, in history of Palace, 186

*Room of Throne*. Position of, 186, 187; twin thresholds of conglomerate in, 186; painted stucco floor of, 187; fresco from, 188

*Court*. Entrance to, 189; rooms round, *ibid.*; plan and reconstruction of, 190 ff.; destruction by fire, 192; painted stucco floor, 193 ff.; walls of, 195 f.; pottery from, 197 ff.; drains in, 201 f.; date of, 203; evidence for date and construction of Palace, 203 f.

*West Corridor and Staircase*. Description of, 204 f.; poros block from, 204; upper part of stairs of wood, *ibid.*; closet under stairs, 205; finds from, 205; date of, 206

*South Corridor*. Direction and construction of, 206 f.; level of, 206; access to Domestic Quarter, 207; evidence of reconstruction, 208

*Western Portal*. Position of, 208; construction of, *ibid.*; finds from, 209; copper ingot from, 210

*N.W. Propylon and Guardroom*. Position of, 210, 266; roadway to, 211; West Terrace Wall of, 211, 273; column bases, 212; earliest entrance to Palace, 213; relation of guardroom to, 213, 214; fresco from, 214, 215; date of, 213; pottery, 215; importance of deposit for date, 215 ff.

*Room N. of W. Portal*. Position of, 217, 273 f.; pottery from, 217 ff.; fragment of plaster step, 219; date of, 220, 221

*North Corridor*. Position of, 221; relation of to S. Corridor, 221, 222, 223, 269; part of Second Palace plan, 223; pottery from, *ibid.*

*Shrine*. Position of, 223; pottery from, 224; stucco altars from, 224 ff.; stratification of, 226 ff.; destroyed by foundations of Doric temple, 229, 231. Chamber of Pithoi, 229 f.; evidence of reconstruction, 230; proofs of destruction by fire, 232

*Megaron*. Plan and position of, 232 ff., 277 ff.; decoration of walls, 235 f.; vestibule, 237; pottery from, 238 f. The Megaron proper, 239 ff.; floor of, 240; hearth of, 241 ff.; construction and decoration of, 241 f.; pottery under, 243; column bases round, 244; Fresco on walls, 249 ff.; reconstruction and date, 252 f. Construction and date of Megaron, 245 ff.

*Ante-chamber*. Position of, 257; finds from, 259, 260, 261; date of, 261

*Rooms 30 and 29*. Position of, 261 f.; finds from, 262; 29 possibly a cistern, 264, 265

*Red Bath*, 264 ff.; plan and position of, 265; resemblance to Cretan lustration tanks, 264

*Panagia Tomb*, 316 f.; discovered by Tsountas, 316; date of, 320, 388; plan of, 317. *Dromos*, dimensions and construction of, 316, 318. *Doorway*, dimensions of, 318; all stone hammer-dressed, *ibid.*; lintel block with relieving triangle, *ibid.* *Tholos*, 319 f.; architectural advance on T. of Aegisthus, 319. See also under Tholos Tombs.

*Perfect Tholos Tomb*. See Genii, Tomb of.

*Perseia*, spring, 402, 420

*Perseus*, shrine of, 420; inscription from, 420, 422

ΦΙΑΙΤΚΣ, inscribed on loom-weight, 200

*Pithos*, 68, 230; dark green steatite, imitating Cretan clay medallion pithoi, 368.—Burials from Cyclopean Terrace House, 306 ff.; date of, 407

*Plaster*, rough clay mixed with chaff, on walls, 156, 195, 214; smooth, 49, 50. Step, painted, 219

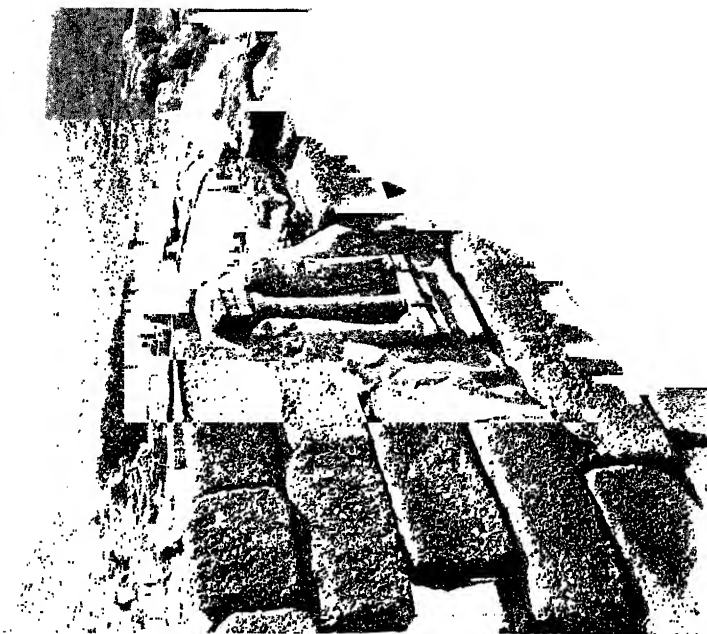
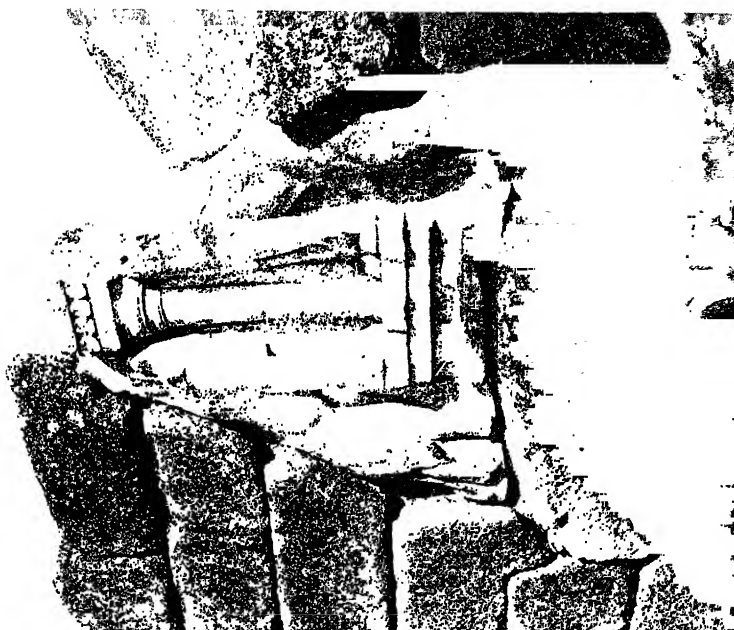
*Poros*, ashlar workin. See under Masonry. Slabs of, liable to break, 112.



- Potter's mark, incised on L.H. II. ware, 311; painted on vase, 228, 229
- Pottery. *Helladic*. *Early*: (1) painted all over with glaze paint, 64, 65; shapes, patterns, technique, 64, 65, 66; (2) unpainted, 64, 65; shapes, 64, 65; early stages represented at Mycenae and Korakou, 66, 114. *Finds of*, 64, 65, 93, 106, 109 ff., 114, 123, 150, 151, 175, 176, 186, 197 ff., 205, 209, 217, 223, 228, 238, 230, 260, 262. Sherds transitional between Early and Middle, 93
- Middle*: *Minyan*, Argive, 65, 83, 93; grey, 305, 306, 313; local, 20; yellow, 157, technique and shapes of, 107, 157; contemporary with matt-painted, 154; date of, 157; link between M.H. and L.H. III. periods, *ibid.* *Matt-painted*, Group B, 1, 2, 3; shapes of, 65, 306. *Plain*, 65, 306. *Finds of*, 27, 43, 44, 46, 54, 74, 84, 91 f., 108 f., 150, 156, 172 f., 181, 182, 197 f., 202, 205, 209, 217, 226, 238, 243, 259, 320, 356, 364, 431
- Late I*. Shapes of, 158, 307, 313; technique of, 308; affinities with metal work, 158; designs on, 175, 307, 313; influence of local style on imported Cretan, 309. Handleless cups, wheel-made, characteristic of L.H. I., II. deposits, 151; duration of shape, *ibid.*; Cretan parallels, *ibid.* *Finds of*, 29, 56, 71, 79, 82, 106, 110, 150, 154, 156, 172, 175 f., 187, 205, 224, 243, 259, 262, 364
- Late II*. The main groups of painted ware, 309: (1) Amphorae of Palace Style, 295, 309; evolution of, 296; long duration of, 324; degeneration of, *ibid.*; importance of, for dating, 324. (2) Cups, goblets, bowls, 10; technique of, *ibid.* (3) Ephyræan ware, 310, 320, 324 329; shapes and technique of, 310, 311. *Plain ware*, 311; shapes and technique, 311. *Finds of*, 28, 71, 72, 73, 177, 181, 197, 202, 218, 224, 295, 324; 374, 386, 400. Relation between designs on L.H. II. pottery and Grave Stelai, 130, 131.
- Late III*. Shapes of, 20, 21; technique of, 21; design, 23. Granary Class of, 30, and note 1, 34, 40; designs of, 40; technique, 41; connection of, with 'Close Style,' 34, 41; importance of, for dating, 40, 51 f.; absence of kylix, 34. Two types of kylix, 208; date of, 219; Zygouries type, 29, 52, 91, 108. *Finds of*, 43, 47, 50, 58, 65, 73, 80, 91, 96, 109, 112, 149, 155, 177, 182, 205, 226, 243, 260, 294, 357, 366, 374, 387, 405, 433
- Geometric*, similarity of, to pottery from Tiryns, 315. *Finds of*, 102, 182, 315, 320, 329, 361, 405
- Orientalising*, shapes and technique of, 35, 36; of local Mycenaean manufacture, 102. *Finds of*, 34, 35, 36, 39, 65, 102
- Proto-Corinthian*. *Finds of*, 82, 224, 226, 405
- Hellenistic*, 37, 39, 50, 65, 71, 101, 312, 315, 366
- RAMP, The Great, 61 ff.: direction of, 10, 61, 63, 67, 68, 148; drains under, 62; construction of, 63, 66 ff.; stratification of, 63 f.; original wall of conglomerate, 67; masked by later rubble wall, *ibid.*; pottery from, 63, 64, 65. Date of, proved by pottery, 66, 67; by comparison with Ramp at Tiryns, 67; upper part of, destroyed by Hellenistic buildings, 68 ff.
- The Little Ramp, 71 ff.: position of, 71; construction of, 71; probable date of, 71, 73; pottery from, 72 f.
- Ramp House, The, 74 ff.: plan of, 74; reconstruction of, 75; M.H. Graves in, 76 f.; date of, 75, 76; early drain in, 78; pottery from, 79 ff.; history of, 83, 84
- Relief, ivory of lions from T. of Aegisthus, 304. Stone from Lion Gate, 15 f.; technique of, 16; symbolism of, *ibid.*
- Repairs made by British School: Grave Circle Area, 6, 7, 108, note 1; Palace, 7; Tholos Tombs, 8; Lion Gate *enceinte*, 10
- Ring, bronze, 34, 37, 54, 291, 355; gold, 54; iron, 421
- Rhyton, silver, 250; steatite, 205; stone, 1, 48, 183, 184, 205
- Rhyton Well, finds from, 1, 2
- Roof, Mycenaean method of construction, 90, 232
- Rosette and triglyph pattern, in marble, 345; position of, in painted designs, *ibid.*
- Rubble piers, method of construction, 204; walls, see under Masonry.

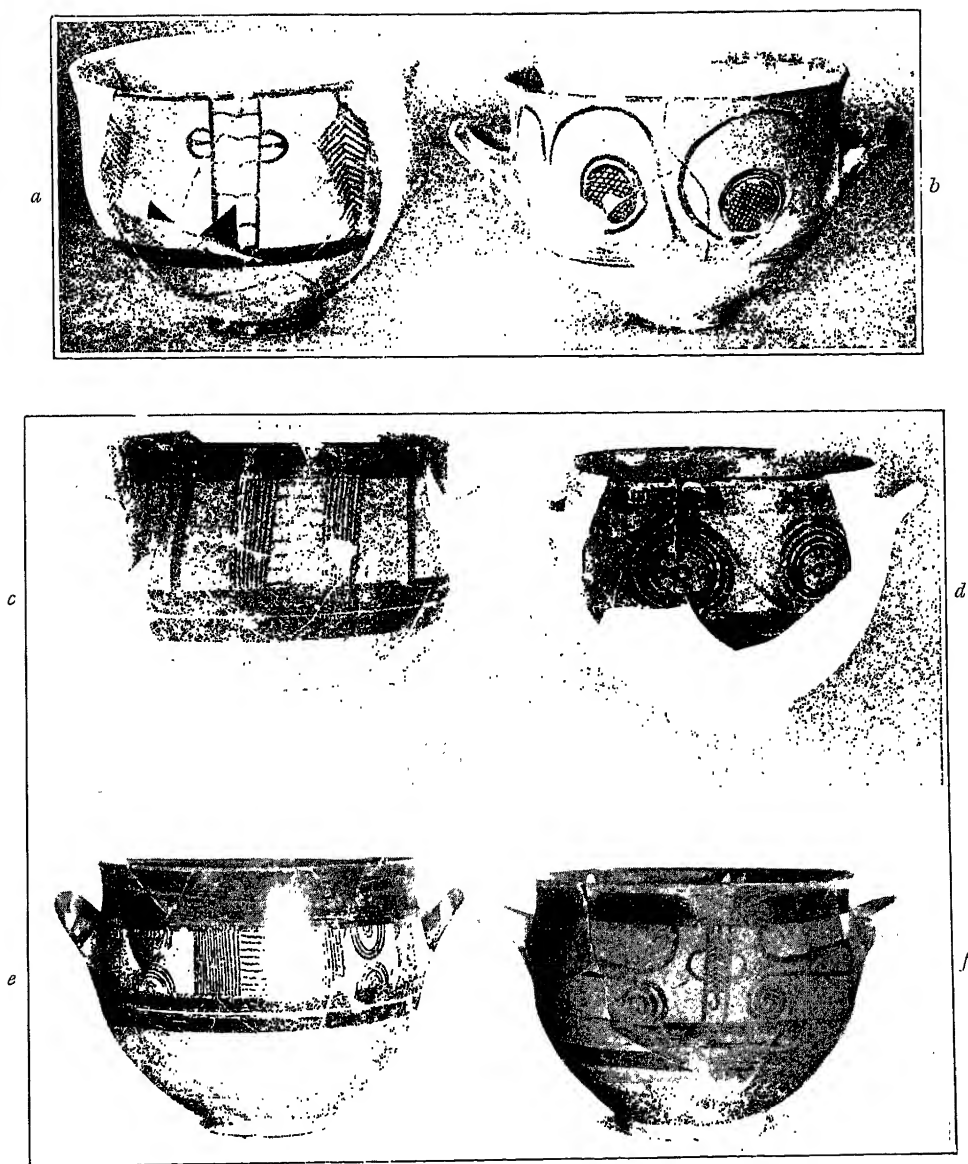
- SANDSTONE, grey, used for stair-treads, 90, 159, 204, 259; red, threshold, 180
- Saw, white flint, 80
- Serpentine vases, fragments of, 356, 364, 367
- Shaft graves, royal, 121; position of early M.H. cemetery influenced by nature of rock, 11, 118. *Grave Circle Area*: enclosed at a lower level, 119, 121, 123; construction of ring of slabs, 105 ff., 119 f., 122 f.; pavement slabs in, 110; date of, 123 f. Finds from: by Schliemann, 114, 123; by Stamatakes, 114, 123; by Tsountas, 103; by B.S.A., 106 ff. Renumbered by Stamatakes, 105, note 1. Relative dates of, 119, 173, 391. *Granary*: position of, 55 ff.; finds from, 56 ff.; date of, 59, 105, 120, 307; opened and plundered in L.H. III., 59, 125
- Shaft Grave Dynasty, date and duration of, 119, 120, 391; worship of, 121 f.; six graves of, in Grave Circle contain remains of nineteen people, 119
- Shells, mussel (kitchen refuse), 157, 178
- Shield, figure-of-eight, on stele, 128
- Silver, plate, 386; rhyton, 250
- Skeletons, in M.H. graves, 76, 77; in L.H. III. grave, 406; in L.H. III. pithos-burial, 407; child's, in Early Iron Age grave, 88
- Sling (?), sculptured on grave-stele, VIII.a, 135 and note 2
- Snail, green stone, 354, 356; grey paste, 354
- South House, position of, 86. *Helladic period*: plan of, 87 ff., 92; construction of walls, 88, 89; upper storey in, 90 f.; finds in, 91 f.; cist-grave in, 88, 90; drain under, 96; date of building, 95. *Hellenistic period*: first occupation, 96, 97; finds from, 96; second *do.*, 97; third *do.*, 97 f.; bath-rooms in, 98 f.; finds, 101 f. History of site, 88, 95, 102 f.
- Spear-head from Fourth Shaft Grave, 124; parallels to, from Leukas and Sesklo, *ibid.*
- Spit-rests, 239, 264
- Spools, bone, 54; clay, 39, 54, 338
- Steatite, block of, 96; bowl, 336; lamps, 336, 337; pendants, 54 (bucranium), 303 (lion's head); seal-stone, 291; spindle-whorl, 24, 27, 29, 36, 48, 54, 56, 96, 149, 205, 218, 291, 303, 385
- Stelai, grave from Grave Circle, 126 ff.; Reichel's work on, 126, 128; date of erection, 119; removal of, from original position, 123; replaced at higher level, 124; distribution of, 144. *Sculptured*: three classes according to style and technique, 138, 140 f., 143: Class I. (X., XI.), 138; description of, 136, 137; date of, 138. Class II. (II.-IX., XII.a-k), 138 f.; description of, 227, 228, 232 ff., 237; characterised by geometrical treatment of curved designs, plain surfaces and human figures, 140, 141; affinity to matt-painted Helladic ware, 141, 142, 144; date of, 142. Class III. (I.), 138, 143; description of, 128 f.; influence of Cretan naturalistic style, 143; date of, *ibid.* Relation of designs on stelai to Mycenaean art, 144 ff. *Unsculptured*: number of, 143; position of, *ibid.*; theories concerning, 143 and note 3
- Stirrup-vases of Tell-el-Amarna type, date of, 12, 355
- Stone, discs, 1, 26; vases, 353, 366
- Straw, chopped, in wall plaster, 156
- Stucco: painted, on hearth, 241; on walls, 237, 240, 259. Used as mortar, see under Mortar. Stair-treads covered with, 159
- Sword, broad triangular on Stele V., 132
- Syra, Early Cycladic cemetery in, 393
- TERRACOTTA: Figurines. *Helladic*: animal, 2, 23, 26, 30, 36, 54, 65, 80, 91, 102, 108, 172, 205, 353, 364, 405. Human, 2, 23, 24, 26, 28, 29, 36, 44, 72, 80, 96, 108, 353, 364. *Greek*: 39 (late Tanagra), 320, 364 (archaic).
- Miscellaneous objects. *Helladic*: chairs, 71, 72, 80; label, 31; fan-shaped ornament, 384 f.; spindle-whorls, 31, 54; spools, 37, 101. *Greek*: bath, 36; lamps, 69, 312, 405; slab with triglyph and metope, 71.
- Theatre, Hellenistic above Tomb of Clytemnestra, 418; excavated in hillside, 418, 420; arrangement of seats in, 418; first row poros, *ibid.*; wooden seats above, 420; stage buildings, *ibid.*; Dionysia held in, 413, 418; *proedria* at, granted, 409, 418
- Thera, alabaster cup from, 1; clay copy of, *ibid.*
- Tholos tombs, position of, at Mycenae, 384, 385; six known to early travellers, 283; bibliography of, 286 f.; three discovered

- by Tsountas, 284; previous excavations in, 283 f. Three groups of, determined by architectural development, 285, 286, 388 ff. *First Group*: tombs in, 287; description of, 287-316; chronological sequence of, 287, 316, 388; distinctive features of, 388; date, 316, 388, 391 f. *Second Group*: tombs in, 316, 330; description of, 316-338; sequence of, 316, 388, 389; distinctive features of, 388, 389; date, 329, 389, 391. *Third Group*: tombs in, 338, 389; description of, 338-387; architectural features of, 389 f.; sequence of, 338, 339, 391; date, 338, 391. Earliest date for mainland type of tholos tombs, 394; possible origin of, in W. Asia, 395; introduced at Mycenae in primitive form, *ibid.*; perfected there, 396; continuous development of, during about 200 years, 397
- Tholos Tomb dynasty, date of, 120, 122; building activity of, 122, 268, 269, 270, 391
- Thresholds, sawn conglomerate, 179, 180, 208, 217, 223, 237, 247; evidence of, for date, 247; characteristic of L.H. III. period, 180, 247. Wedge-construction of, in tholos tombs, 347 f., 378, 390. Roughened to give foot-hold, 14
- Throwing-stick (?), 137
- Tiles: Helladic, drain, 187; shape and dimensions of, *ibid.*; parallels to, at Tiryns, *ibid.* Greek, floor-, 69, 101; roof-, 37, 70, 79, 101, 312, 337
- Tortoise, stamped on loom-weight, 65
- Triangle, relieving, over lintel-block, first appearance of, in tholos tombs, 318, 388; shape of, 342; masked, 344, 346; architectural value of, 346
- Triglyph and rosette pattern: painted, on stucco, 335; on fresco from Ramp House, 236. Carved limestone, from Gynnasium, 236; from Propylon, 237
- Trochus shell, in glass paste, 354
- VASES, alabaster of Egyptian type, 336; serpentine, 356, 364, 367; stone, 364. See also under Amphora, Pottery, Stirrup-vases.
- WAVE and star pattern on hearth, 241; variations in, 243
- Well-shafts, in House of Warrior Vase, construction and date of, 85 f.
- Wheat, carbonised, 49
- Whetstone, 368
- Whorls, spindle: clay, conical, 2, 54, 149, 182, 366; conoid, 2, 54; wheel-shaped, 54; date of, 218, 387. Steatite, button, 48, 54, 205, 218, 291, 385; conical, 24, 27, 29, 36, 48, 54, 56, 149, 303
- Wild-duck, drawing of, on M.H. sherd, 173
- Window-sill, wooden, in W. wall of Court of Palace, 190
- Wine-press, Hellenistic, 69 ff.
- Wing, ivory, inlaid blue paste, 371
- Wire, lead, 386
- Wooden, beams, 149, 152; framework for crude-brick walls, 87 f., 90; for rubble *do.*, 240; roof of Lion Gate, 17; struts in Grave Circle, 112; window-sill, 190
- ZARA, Mt., 429
- Zygouries: E.H. pottery from, later than from Mycenae, 66; L.H. III. type of kylix, 29, 52, 108



LION GATE.  
RELIEF OF LIONS: *a*, FROM E.; *b*, FROM W.





DEEP BOWLS OF L.H. III. STYLE. (Scale 2 : 9.)

*a*, NEAR WELL (53); *b*, *d*, *e*, STRATUM II., BY W. WING OF LION GATE; *c*, SOUTH HOUSE, CENTRAL ROOM; *f*, GRANARY, SOUTH CORRIDOR.

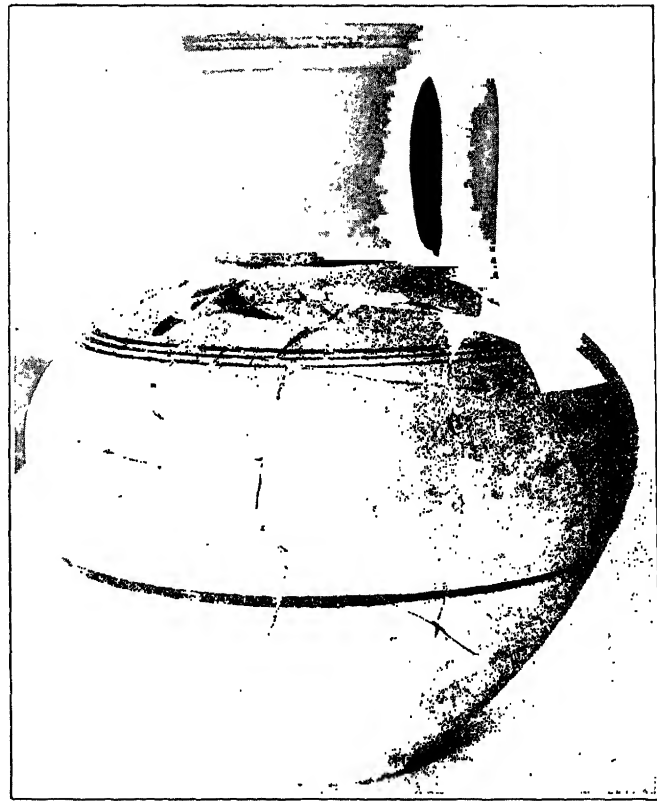




*c*



*a*



*b*

LION GATE: L.H. III. VASES OF GRANARY CLASS.

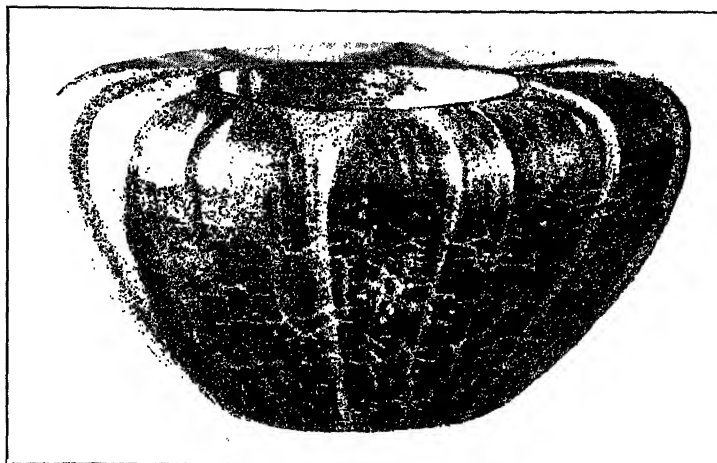
*c*, BATH GRAVE WITH NEST OF VASES AS FOUND.

*a*, PLAIN VASE FROM NEST OF VASES. (Scale 1:4.)

*b*, JUG FROM DO. (Scale 1:3.)

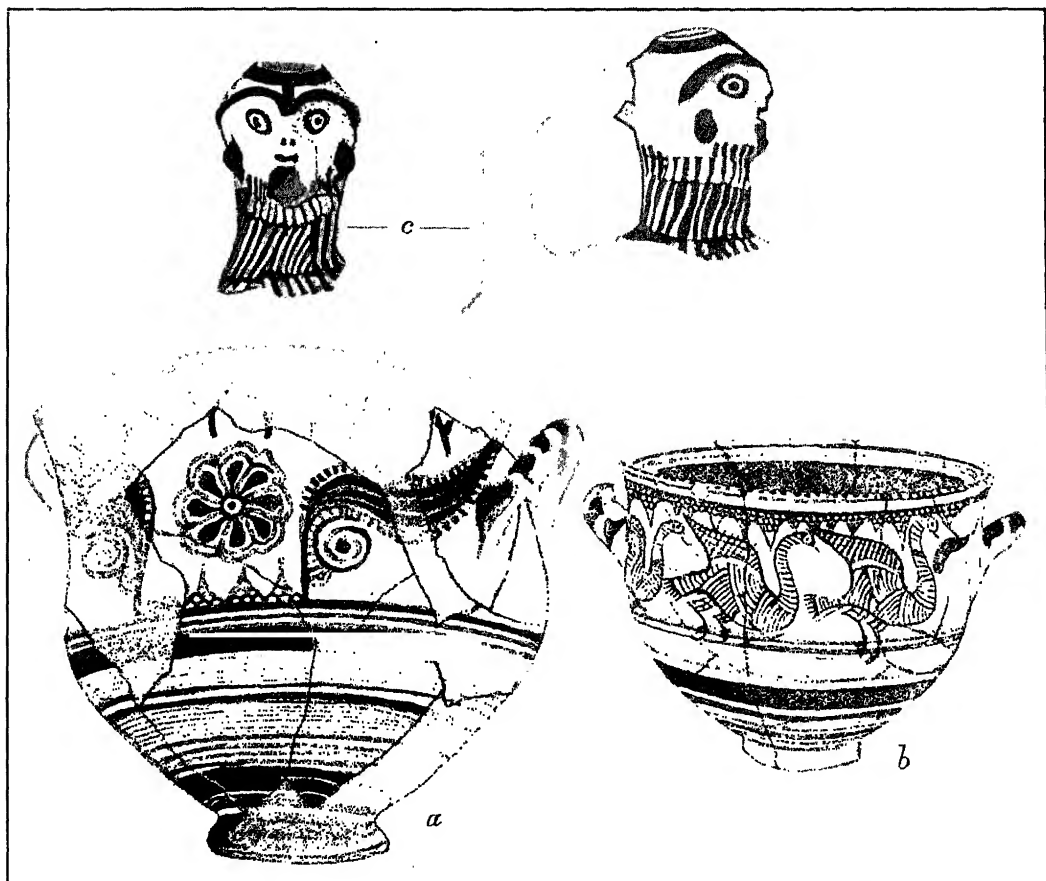






LION GATE.

*d*, STONE BOWL (restored) FROM STRATUM IV. BY W. WING. (Scale 2 : 3.)

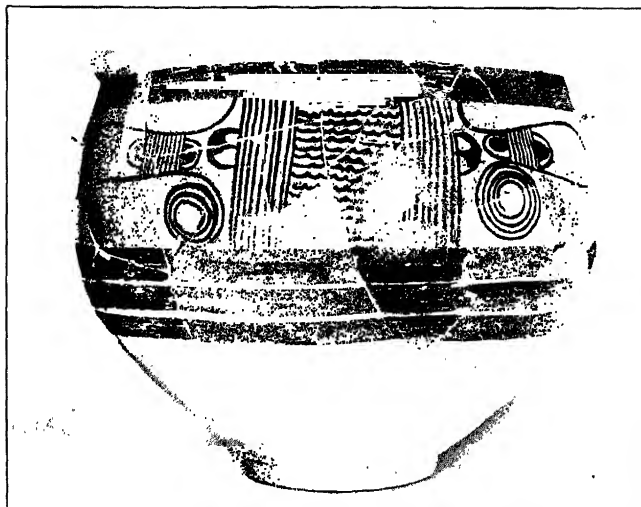


GRANARY: L.H. III. VASES. (Scale 1 : 2.)

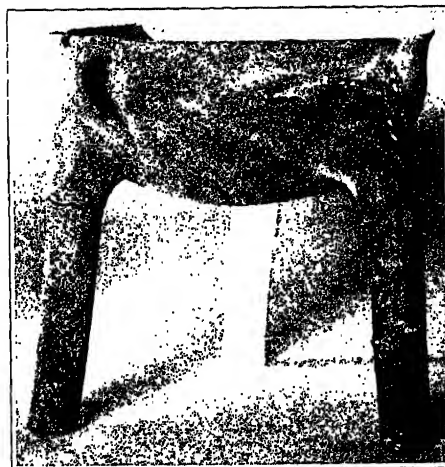
*b*, 'CLOSE STYLE' OF GRANARY CLASS; *a*, FROM EAST AND WEST CORRIDORS; *b*, FROM EAST BASEMENT.

*c*, NECK OF ANTHROPOMORPHIC VASE FROM SOUTH CORRIDOR.





*a*



*b*

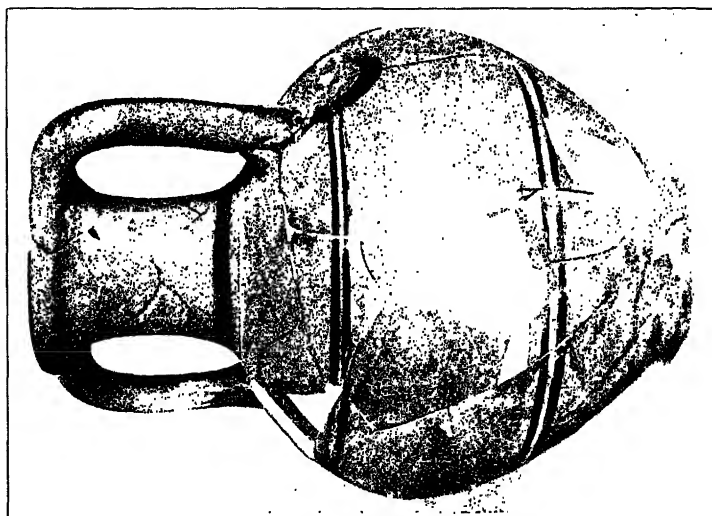
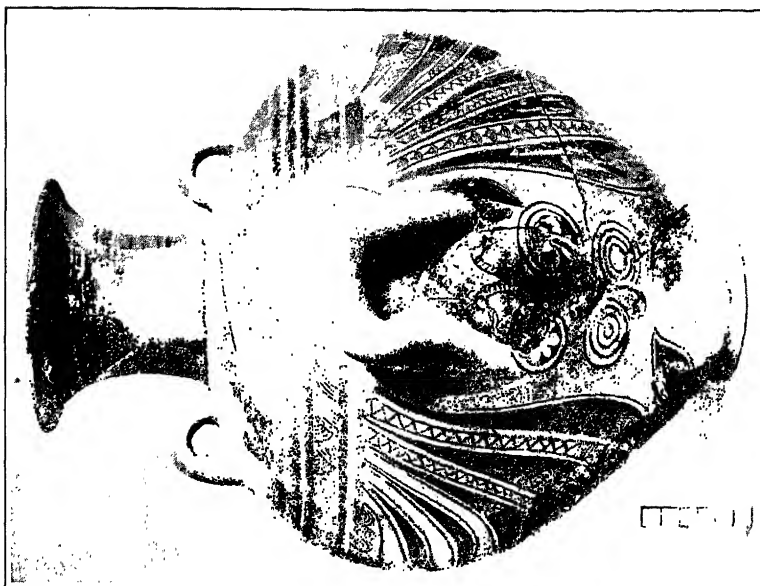


*c*

*d*

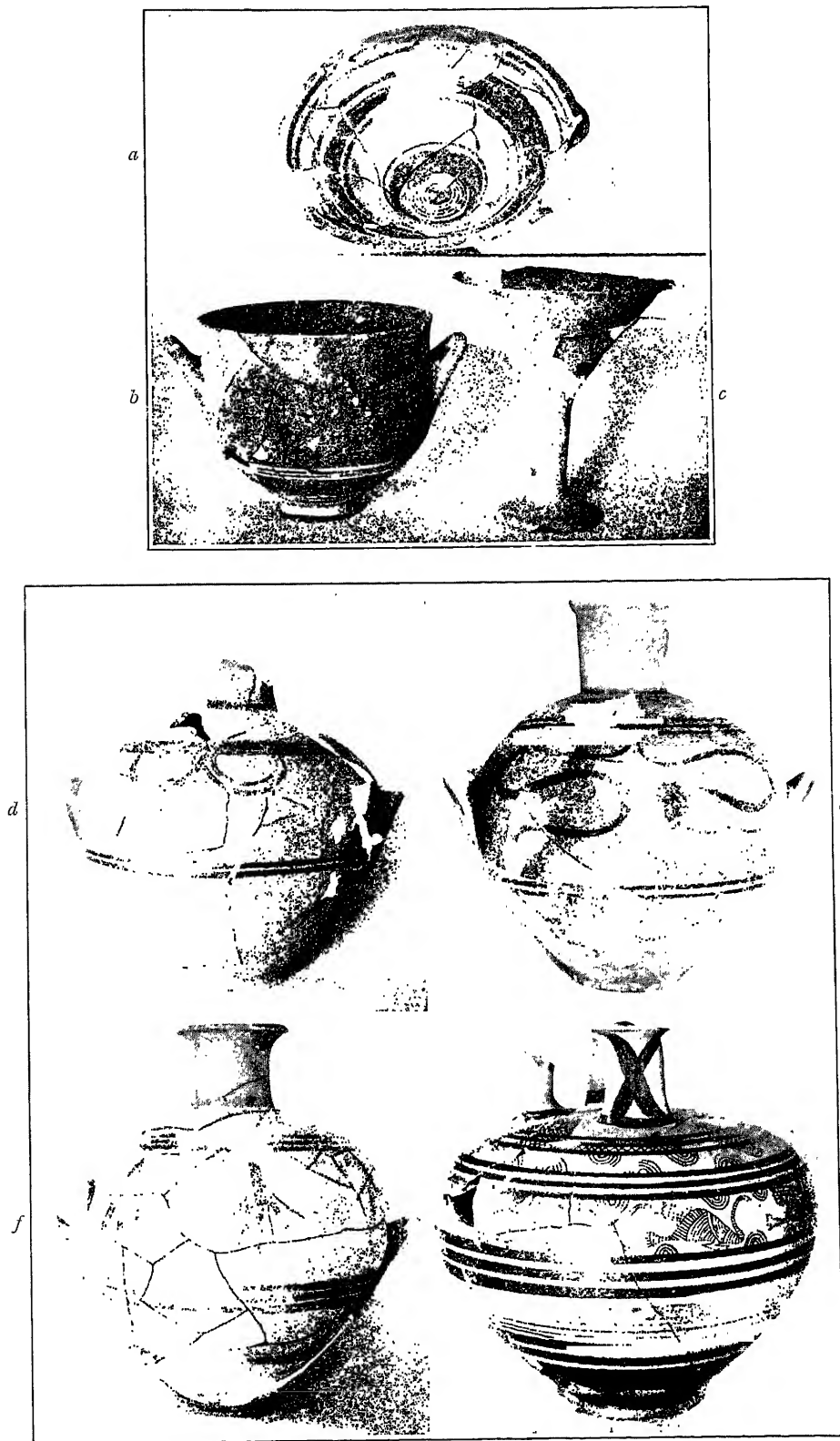
GRANARY: L.H. III. VASES FROM EAST AND WEST CORRIDORS; *c*, *d*, OF THE GRANARY CLASS. (Scales: *a*, 1:4; *b*, *c*, *d*, 1:3.)





*a* GRANARY: L.H. III. VASES OF GRANARY CLASS. (Scale 1:4)  
*b*, FROM EAST BASEMENT; *b*, FROM WEST DO.

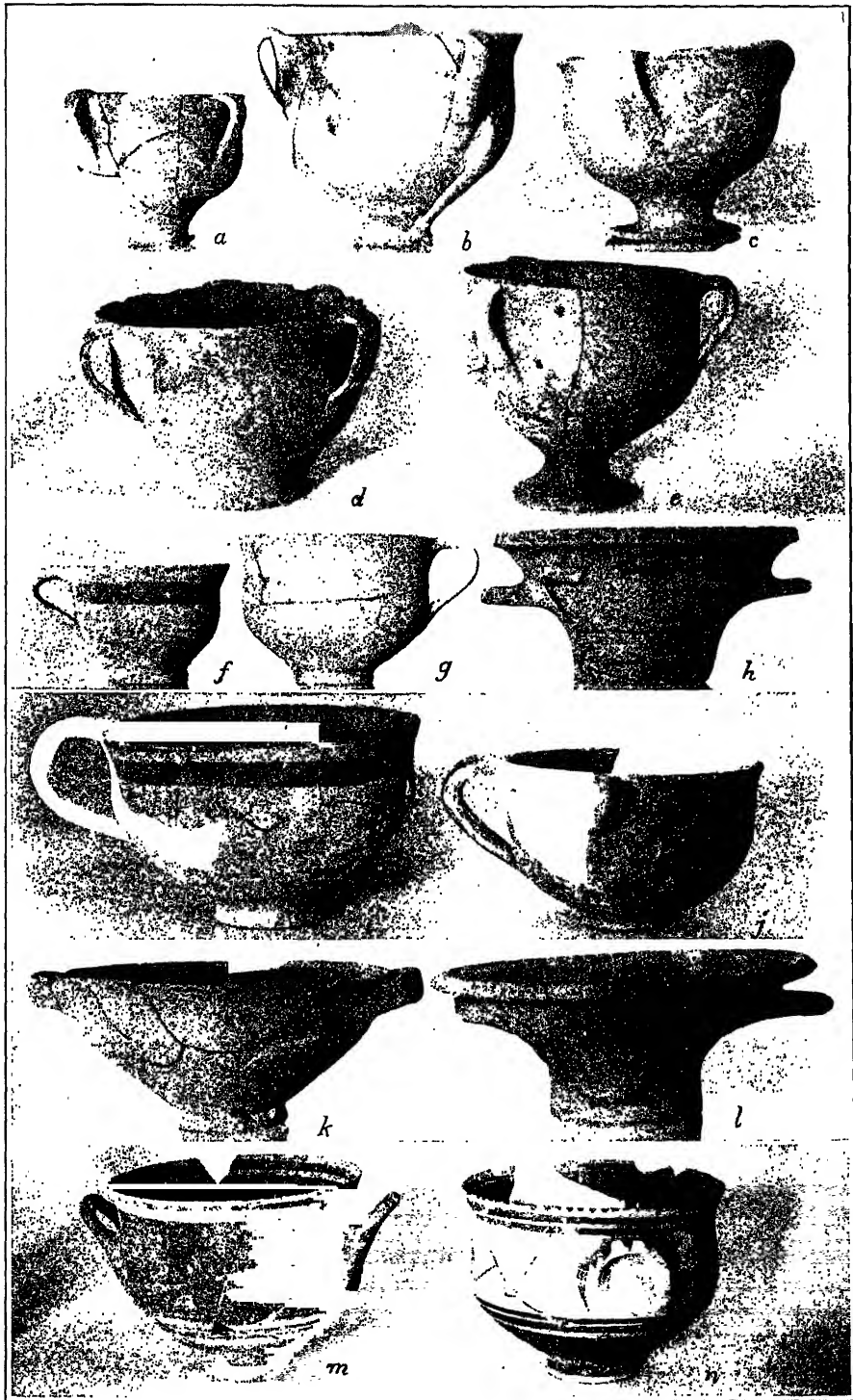




GRANARY: L.H. III. VASES OF GRANARY CLASS FROM EAST BASEMENT.  
(Scales: *a, b, c, g*, 1:4; *d, e, f*, 1:8.)

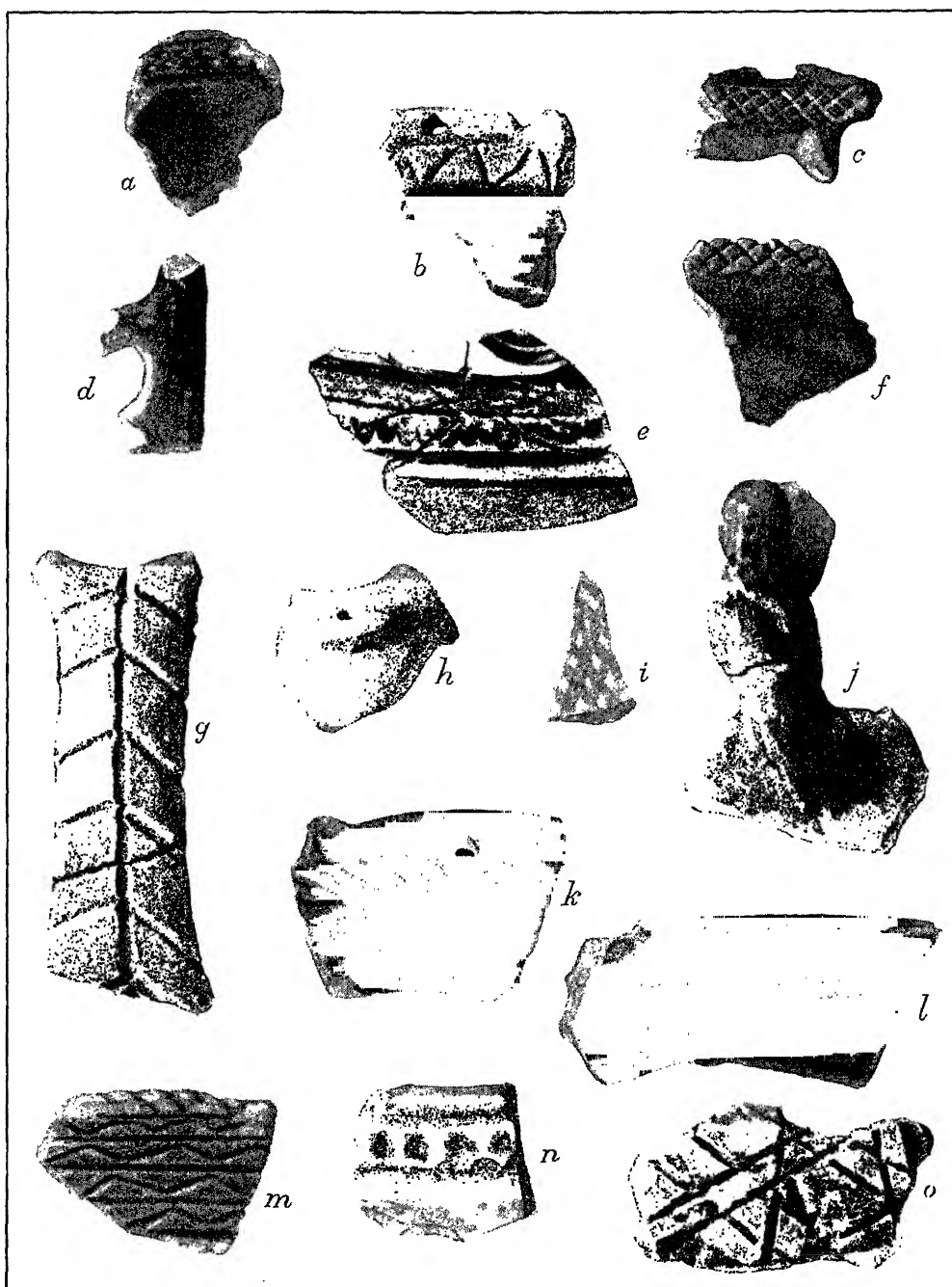






GRANARY: L.H. III. VASES OF GRANARY CLASS FROM EAST BASEMENT.  
(Scale 1:3.)





GRAVE CIRCLE AREA : EARLY AND MIDDLE HELLADIC POTTERY. (Scale 1 : 2.)

E.H. : *a-d, f, g, j-n*, FROM STRATA AT FOOT OF GREAT RAMP; *h*, FROM WALL 63;  
*i, c* FROM TEST AT 62.

M.H. : *e*, (MATT-PAINTED WARE, GROUP B III.), FOUND S. OF GRAVE CIRCLE.

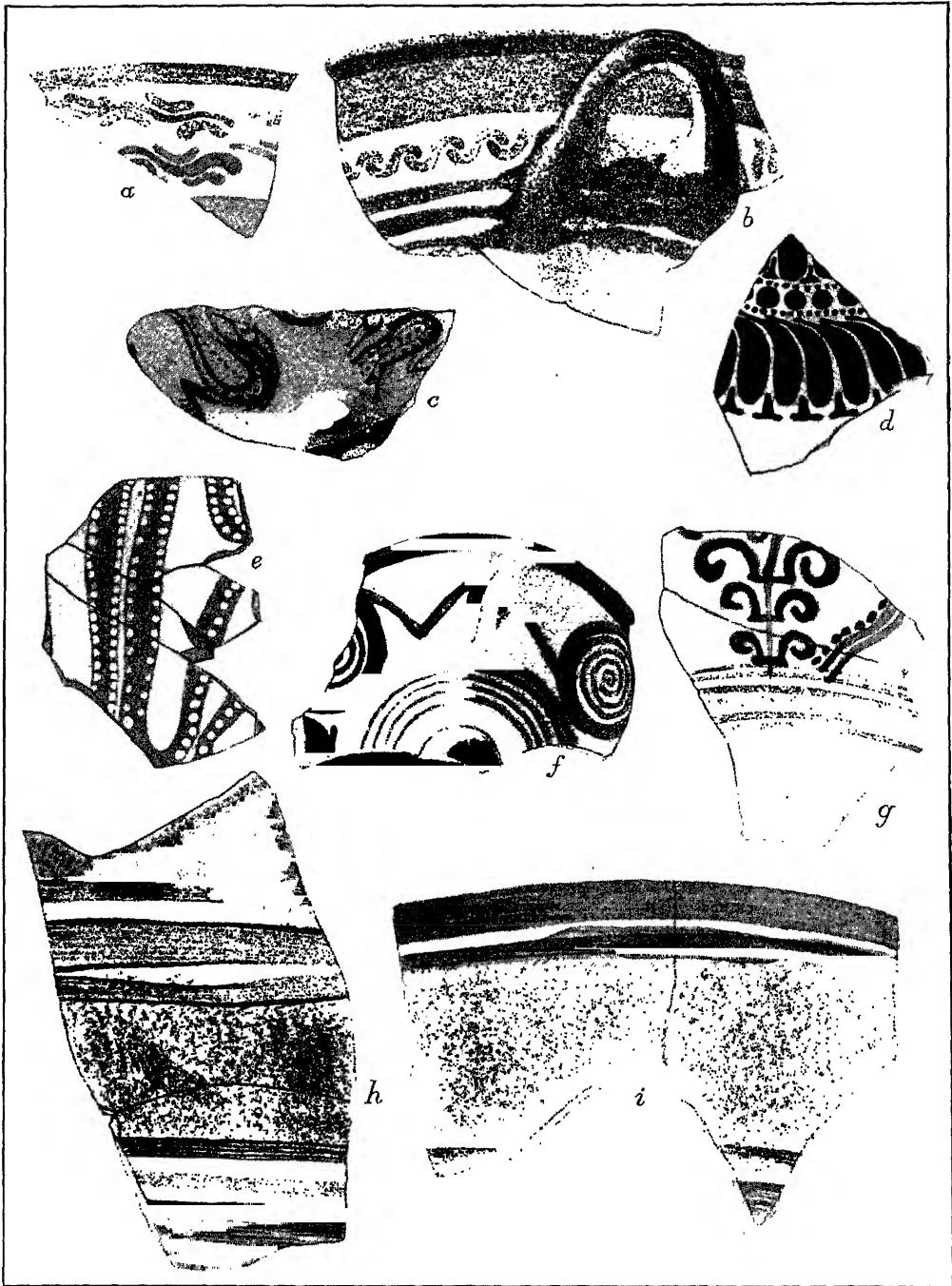




GRAVE CIRCLE AREA : HOUSES TO SOUTH.

*a*, House of Warrior Vase from E.  
*c*, Ramp House, showing 1, South House, 2, Drain, 3, M.H. Graves.  
*b*, *d*, South House; *b* from N.W. and *d*, N. Wall of the W. Room, showing 4, Hellenistic Wall,  
 5, N. Hall, 6, vertical Beams, 7, horizontal ditto and 8, Door Frame.



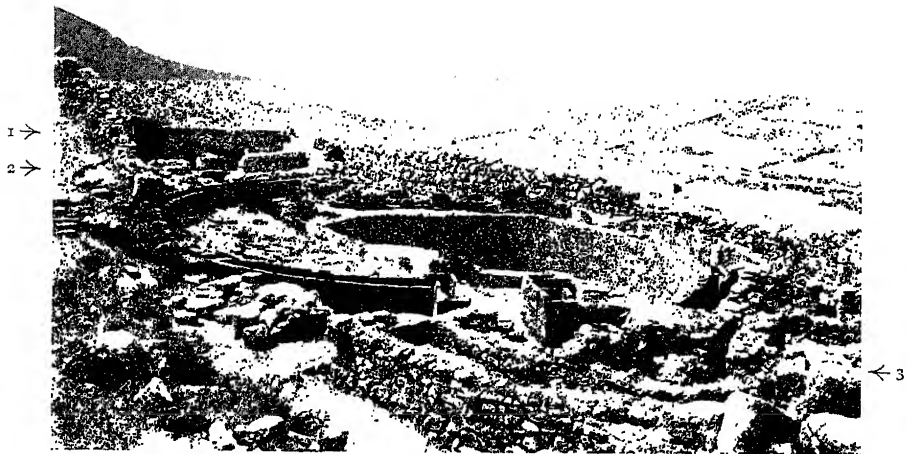


GRAVE CIRCLE AREA: L.H. II. AND III. VASE FRAGMENTS (Scale 1 : 2).

*a-c, g, FROM FOOT OF LITTLE RAMP; d-f, h, i, FROM RAMP HOUSE.*







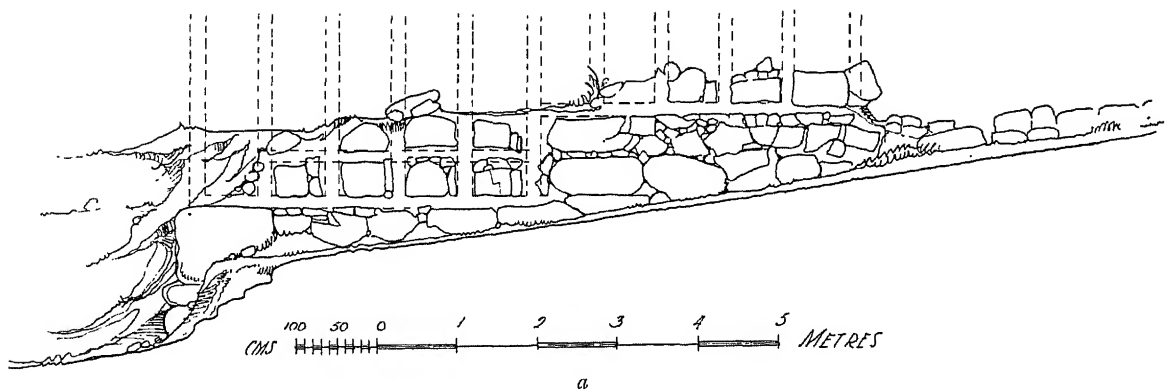
*a*, FROM N. WITH ARGIVE PLAIN IN DISTANCE.  
1, South House; 2, Ramp; 3, Granary.



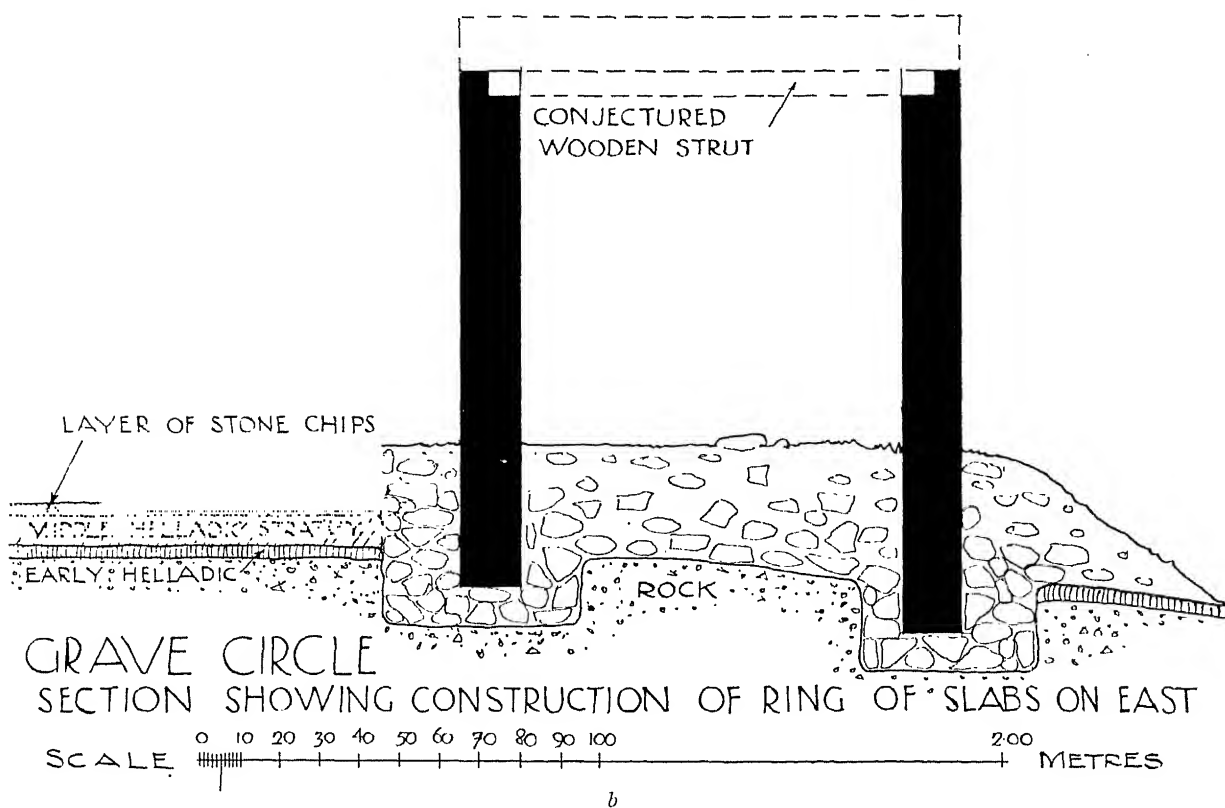
*b*, FROM S. WITH MT. KYLLENE IN DISTANCE (left).  
4, Ramp; 5, Ramp House.

THE GRAVE CIRCLE.



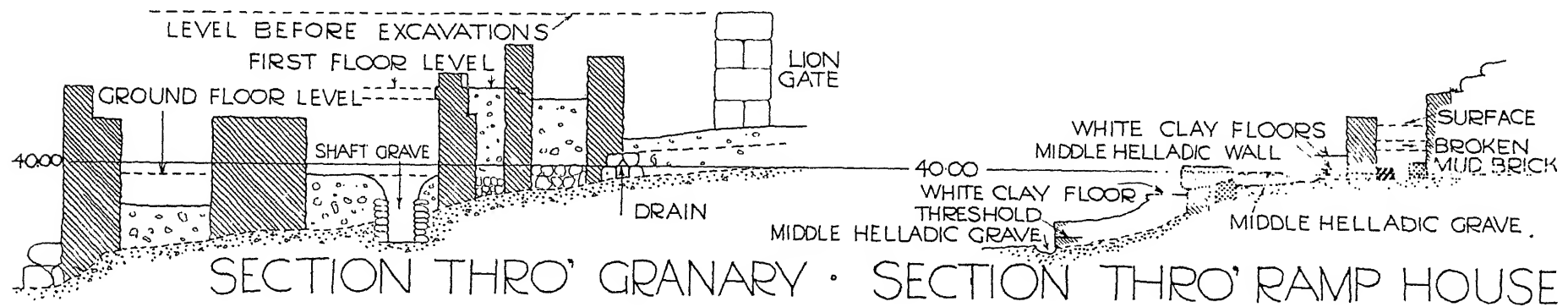
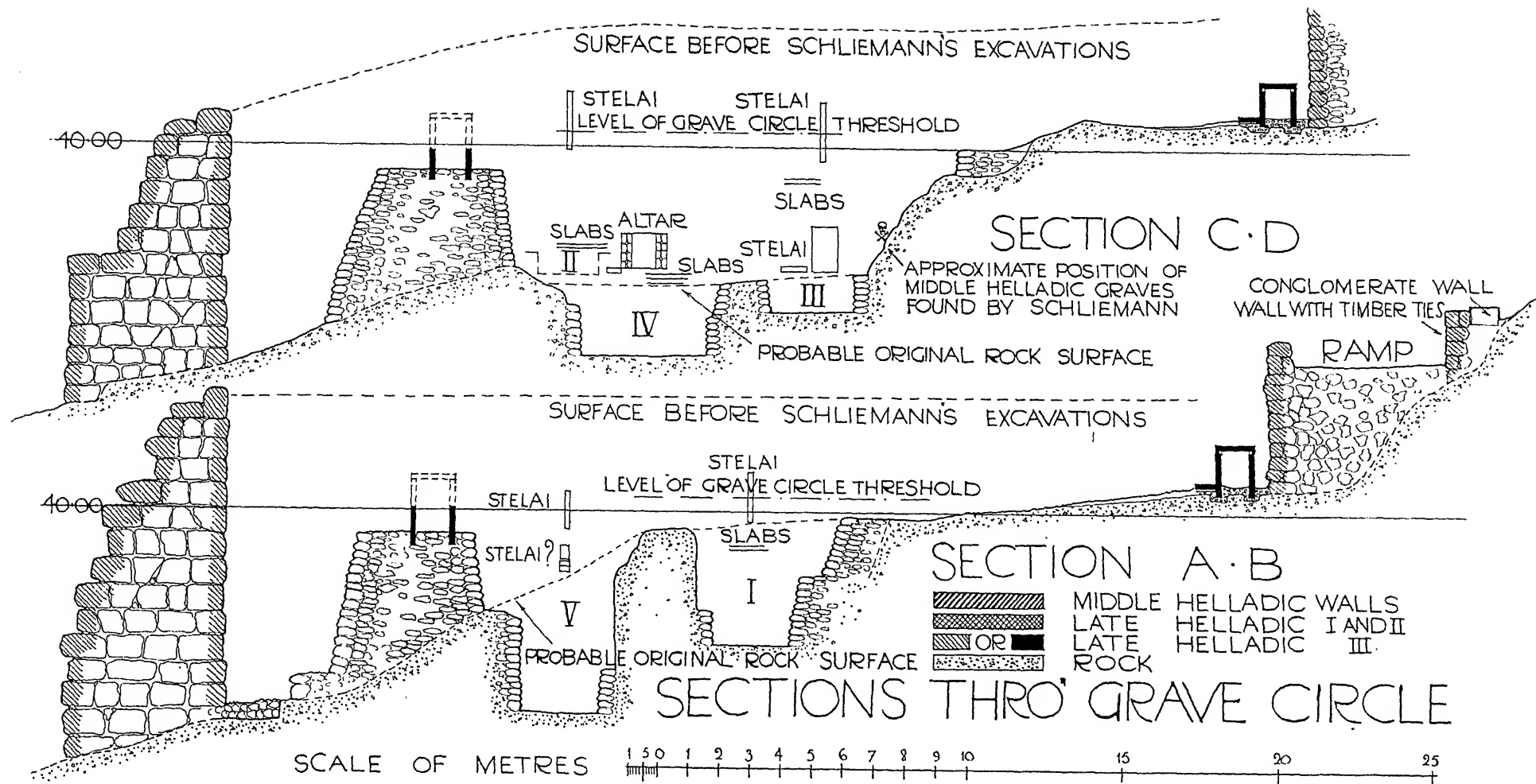


GREAT RAMP: ELEVATION OF LATER RUBBLE WALL WITH TIMBER FRAME (27) ON E. SIDE.



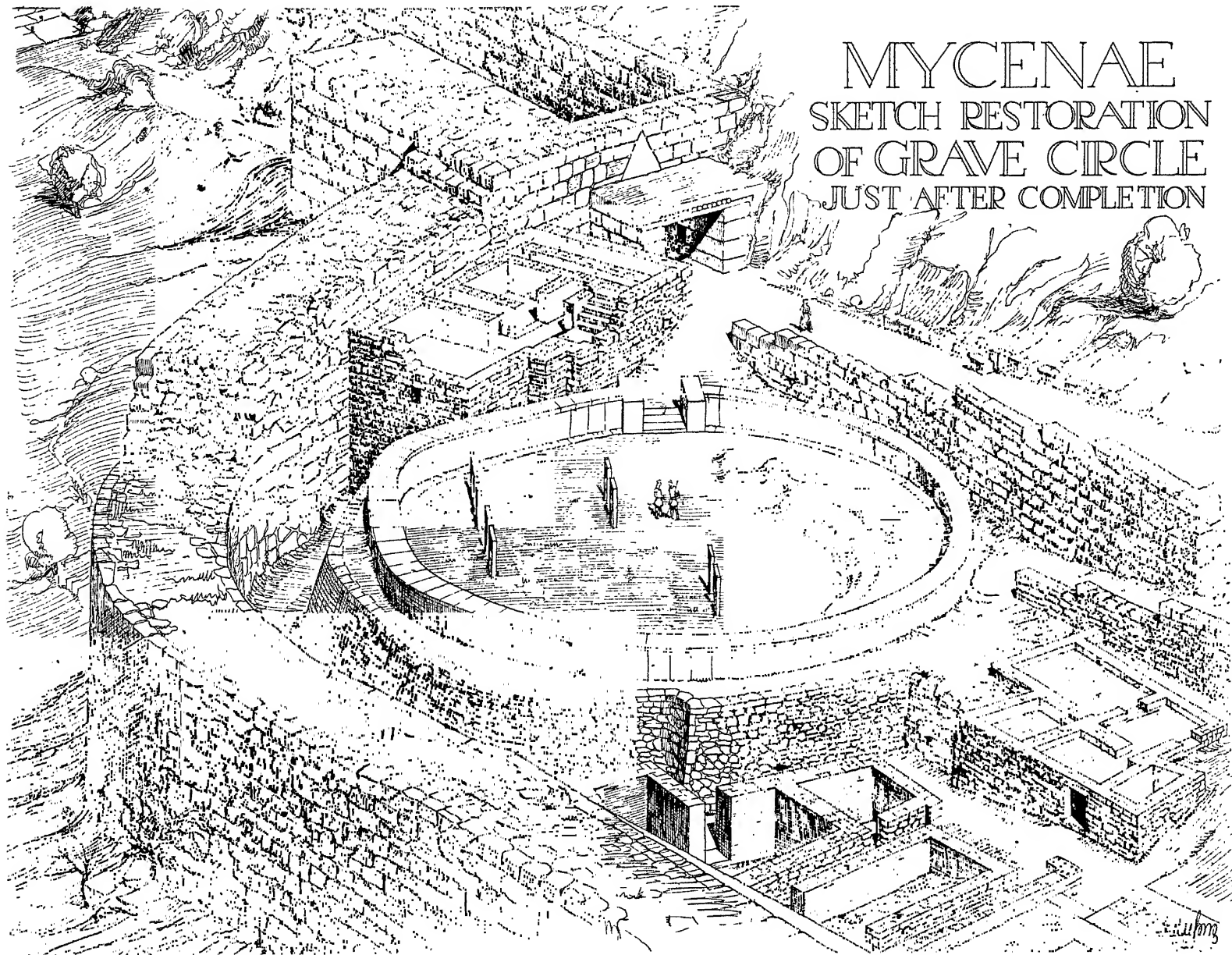
GRAVE CIRCLE: SECTION THROUGH RING OF SLABS.





SECTIONS THROUGH GRAVE CIRCLE, GRANARY AND RAMP HOUSE.

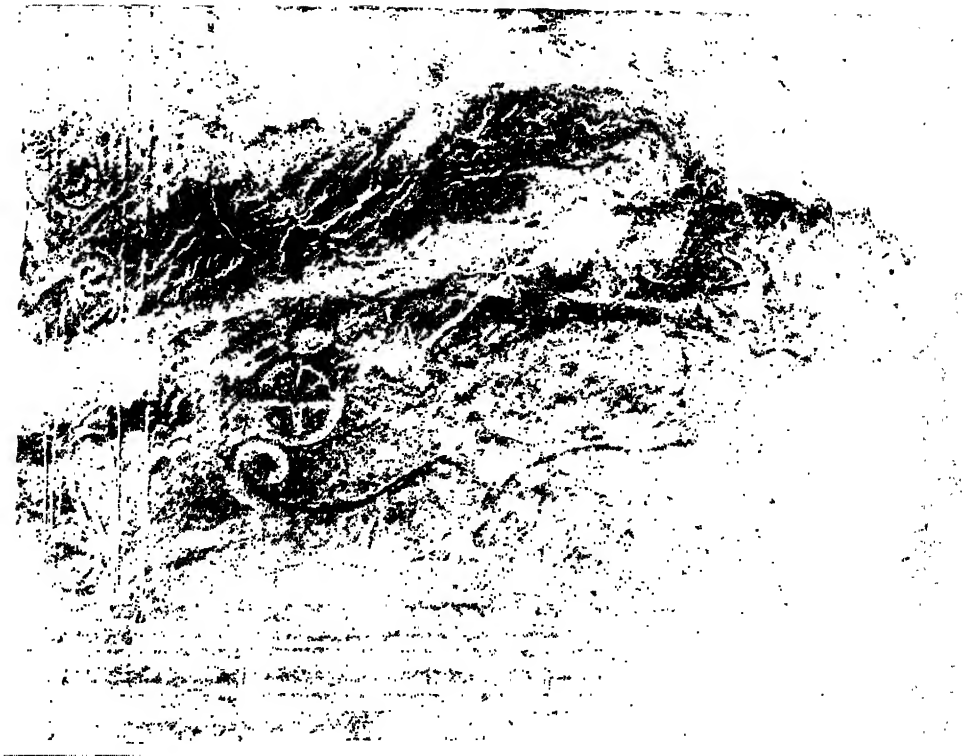




SKETCH RESTORATION OF GRAVE CIRCLE.

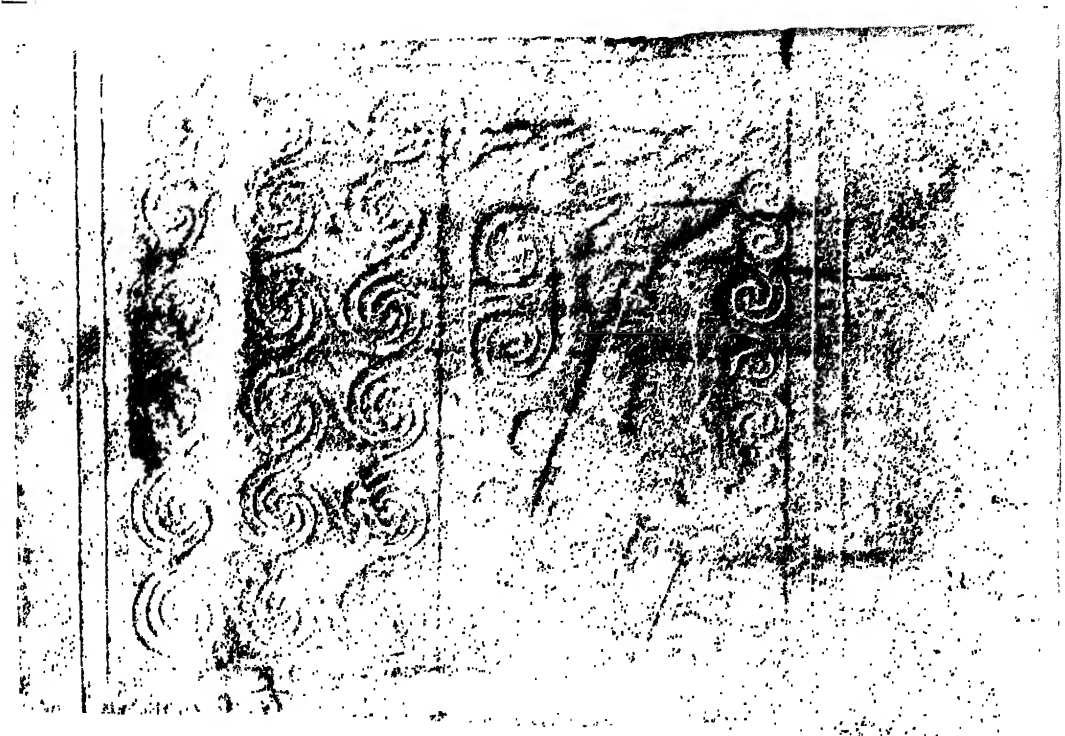






GRAVE CIRCLE : STELE I, FROM THE FIFTH SHAFT GRAVE.





STELE V.  
GRAVE CIRCLE : STELAI IV., V. FROM THE FIFTH SHAFT GRAVE.



STELE IV.

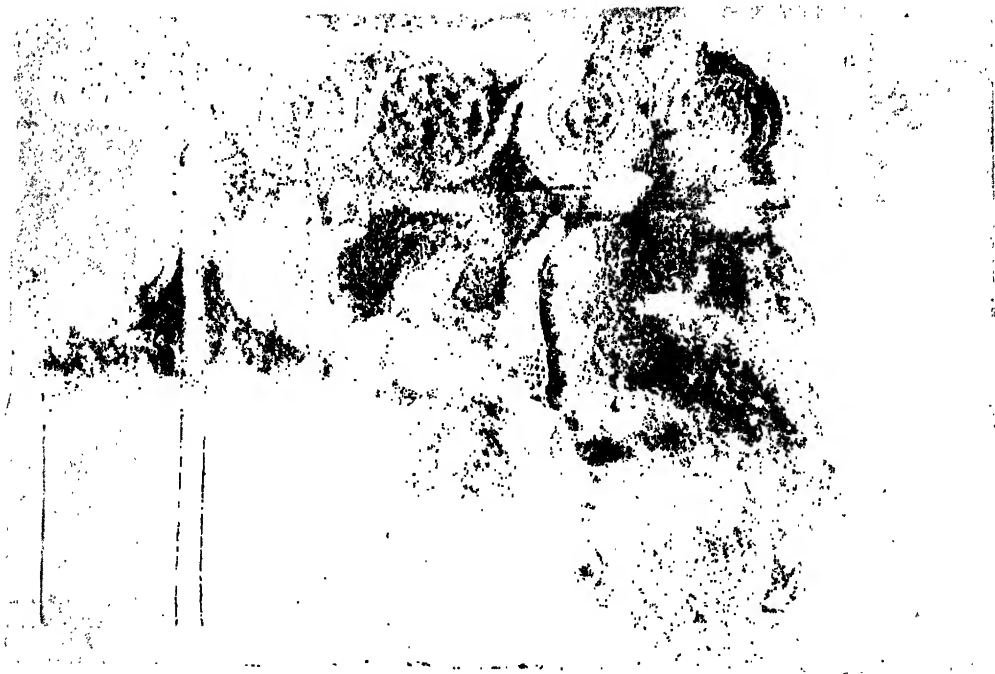




STELE VII *b*.



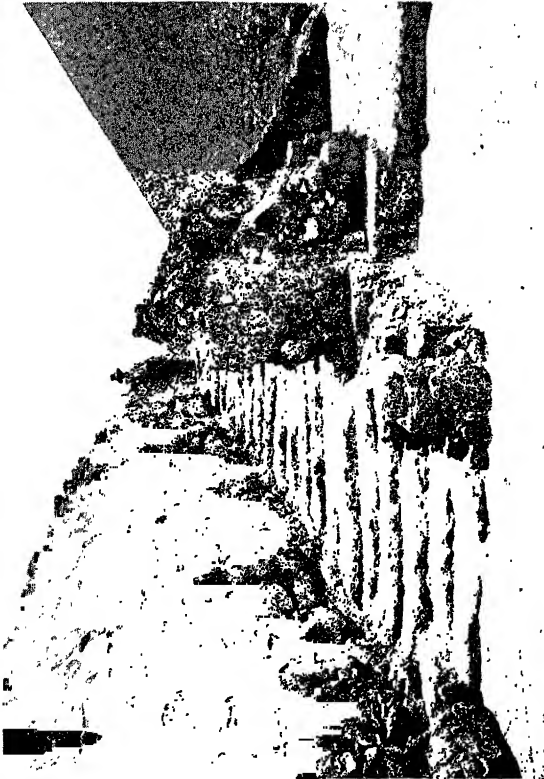
STELE VII *a*.



STELE VI.

GRAVE CIRCLE : STELAI VI., VII. *a*, *b*.



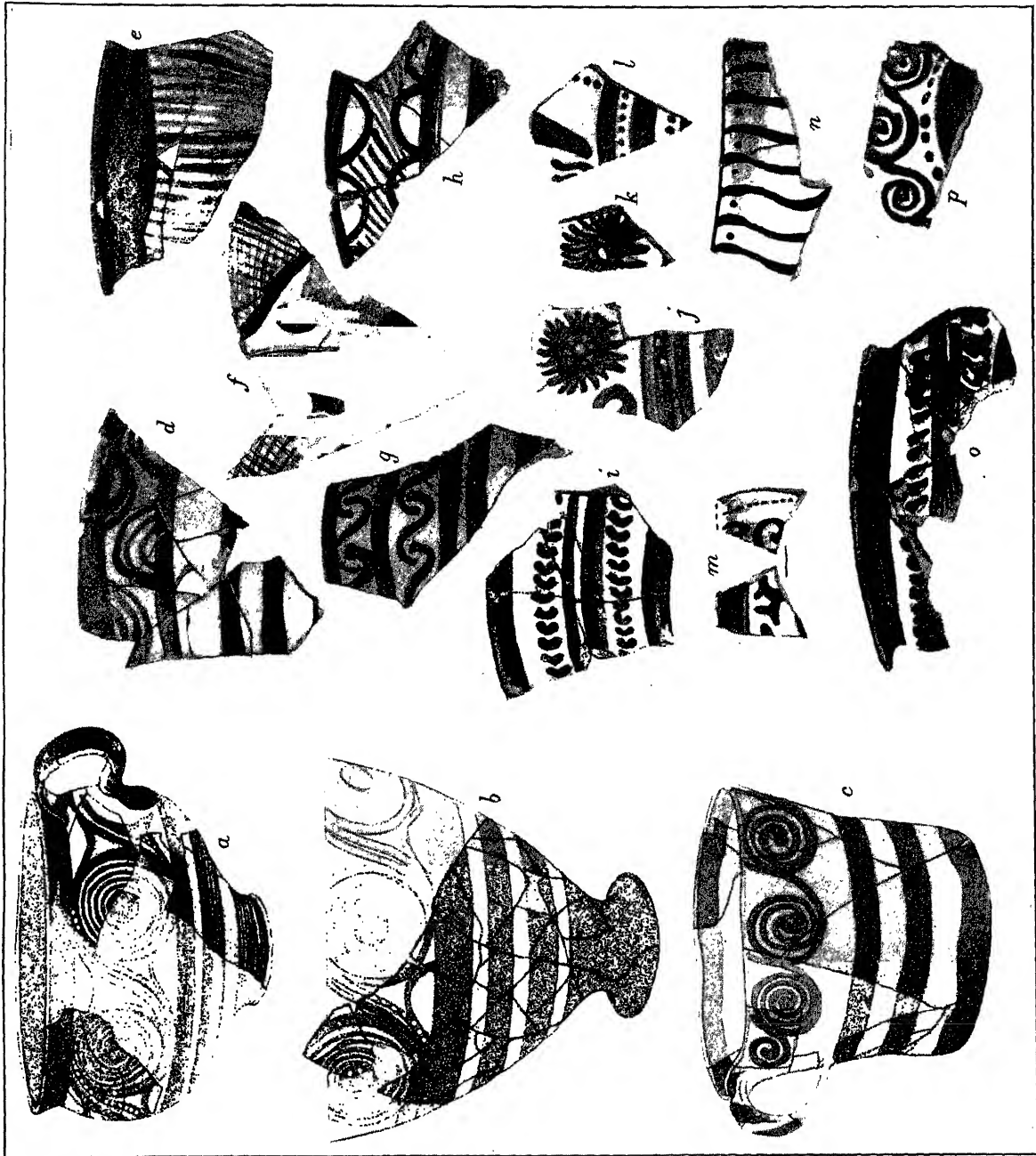


PALACE: GRAND STAIRCASE AND PITHOS AREA.

*a*, GRAND STAIRCASE FROM W.; *1*, Bench. *d*, CONGLOMERATE THRESHOLD.  
*b*, *c*, PITHOS AREA, *b* FROM N., *c* FROM S.; *2*, Pithoi; *3*, W. Wall of Staircase; *4*, W. Terrace Wall; *5*, 'Old Wall'; *6*, Man standing by N. Wall of Pillar Basement.



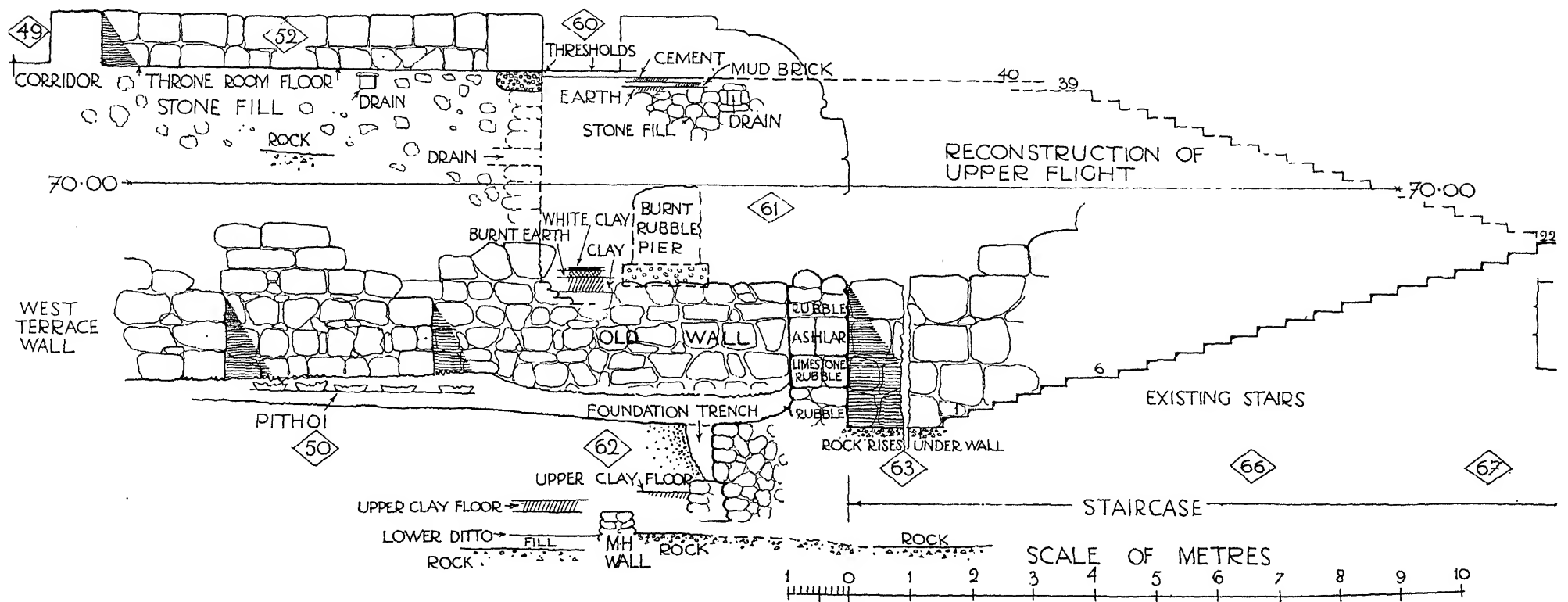




PALACE: L.H. I. POTTERY FROM BELOW FLOOR OF EAST LOBBY OF GRAND STAIRCASE. (Scale ca. 1 : 2.)

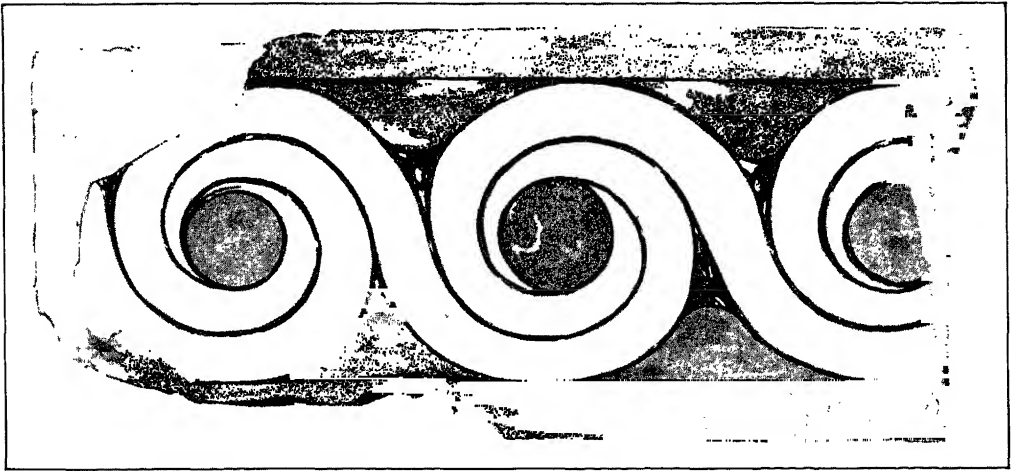


# · MYCENAE · PITHOS AREA · DIAGRAMMATIC SECTION · · PALACE ·

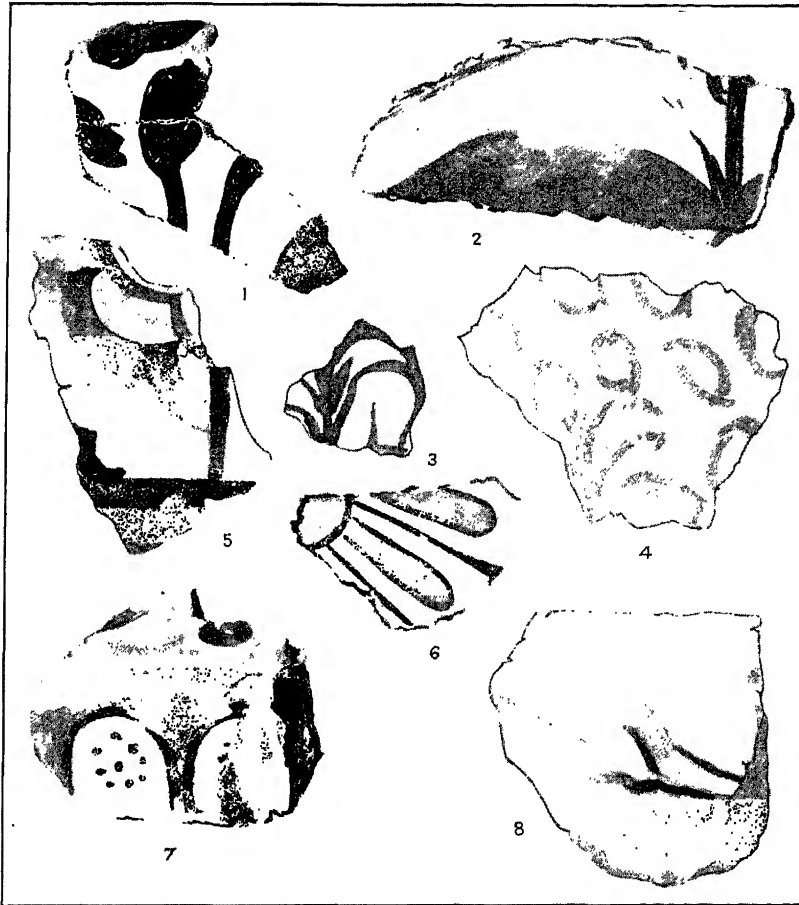


PALACE: DIAGRAMMATIC SECTION OF PITHOS AREA.





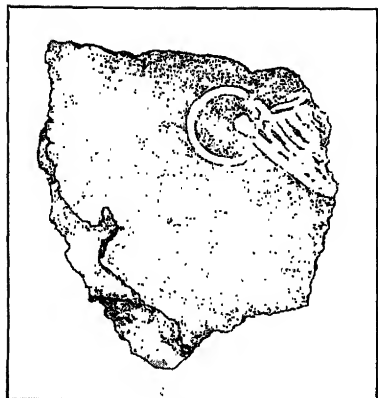
PALACE: *a*, STUCCO STEP FROM ROOM N. OF WESTERN PORTAL. (Scale 1:2.)



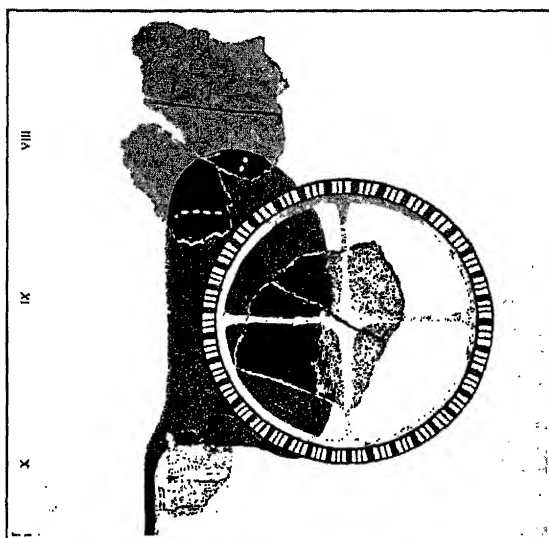
PALACE: *b*, FRESCO FRAGMENTS. (Scale 2:3.)

1, 2, FROM EAST LOBBY; 3-5, PITHOS AREA; 6, GUARDROOM; 7, PORCH; 8, MEGARON.

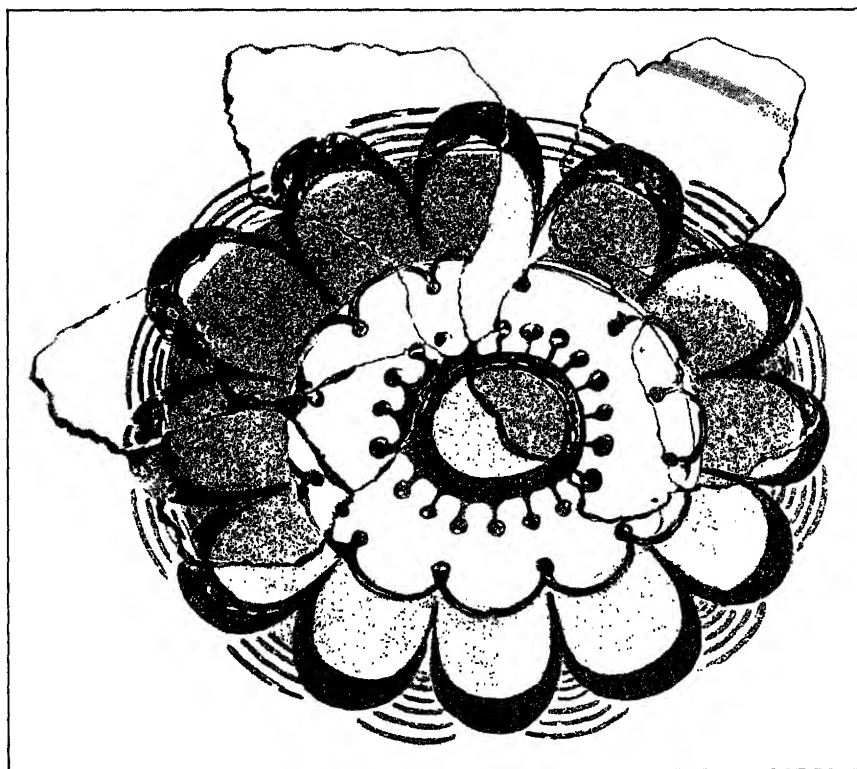




c



b



a

PALACE: FRESCO FRAGMENTS.

a, RECONSTRUCTED FRAGMENTS FROM PITHOS AREA, A2, B14 (v). (Scale 1 : 2.)

b, Ditto CHARIOT FROM FRIEZE. (Pl. XXVII.) (Scale 1 : 3.)

c, HELMET ON FRAGMENT OF MEGARON FRESCO. (Scale 2 : 3.)

Athenis Museum.







PALACE : RECONSTRUCTION OF FRESCO FRIEZE OF WARRIOR, GROOMS AND HORSES (B. I.). FROM TSOUNTAS' EXCAVATIONS. (Scale 1 : 3.)  
Athens Museum.





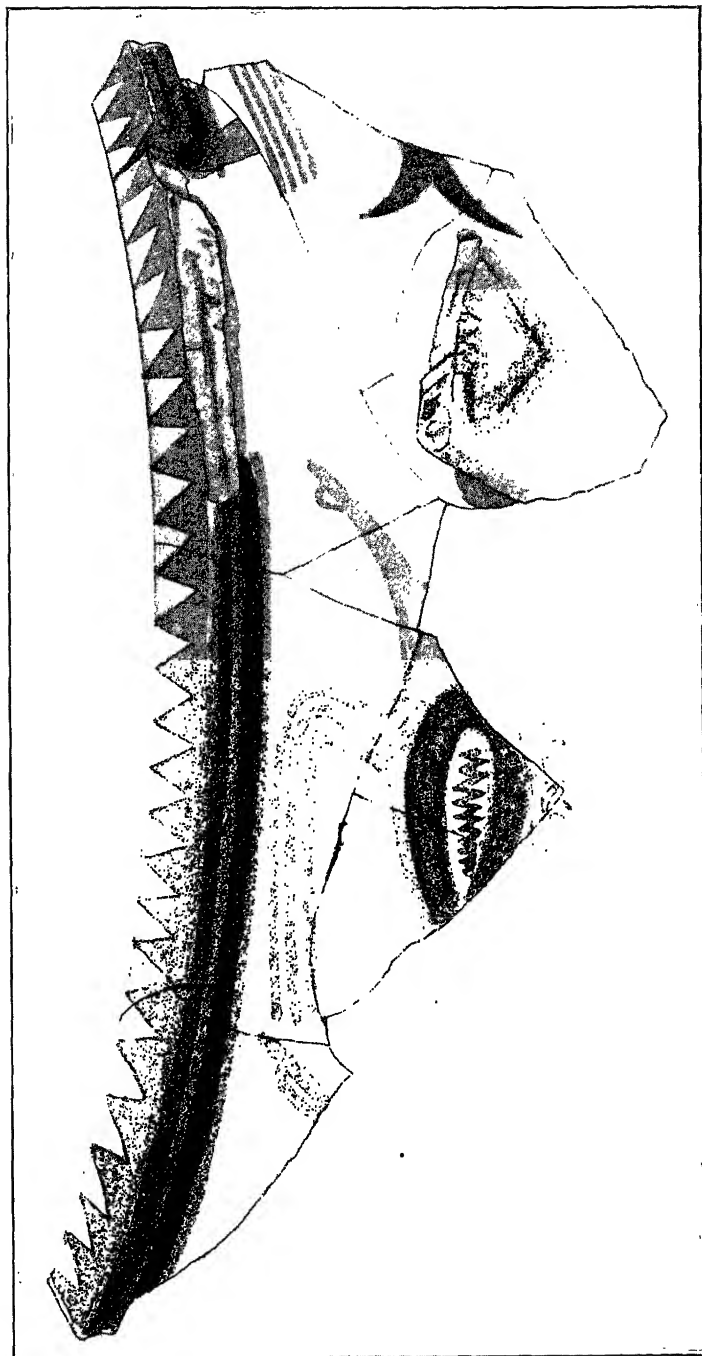
PALACE: FRESCO FRAGMENTS FROM TSOUNTAS' EXCAVATIONS. (Scale 2:3.) Nauplia Museum.





PALACE : FRESKO, RECONSTRUCTION OF SPIRAL AND LOTUS DESIGN (B. II.) FROM TSOUNTAS' EXCAVATIONS. (Scale 1 : 4.)  
Nauplia Museum.

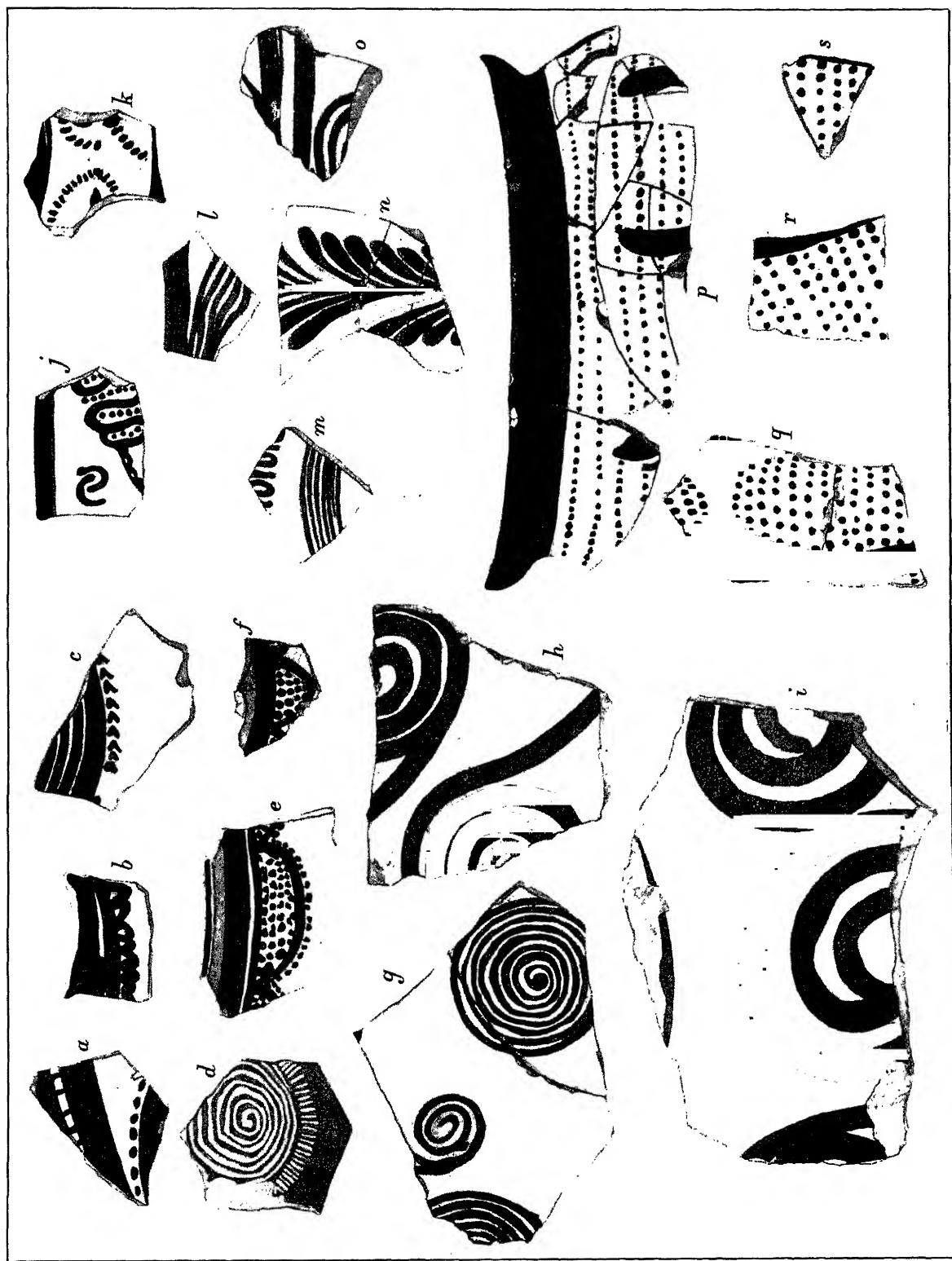




• PALACE : PITHOS AREA, FRAGMENT OF M.H. VASE (MATT-PAINTED GROUP B, III.) (Scale 1 : 2.)







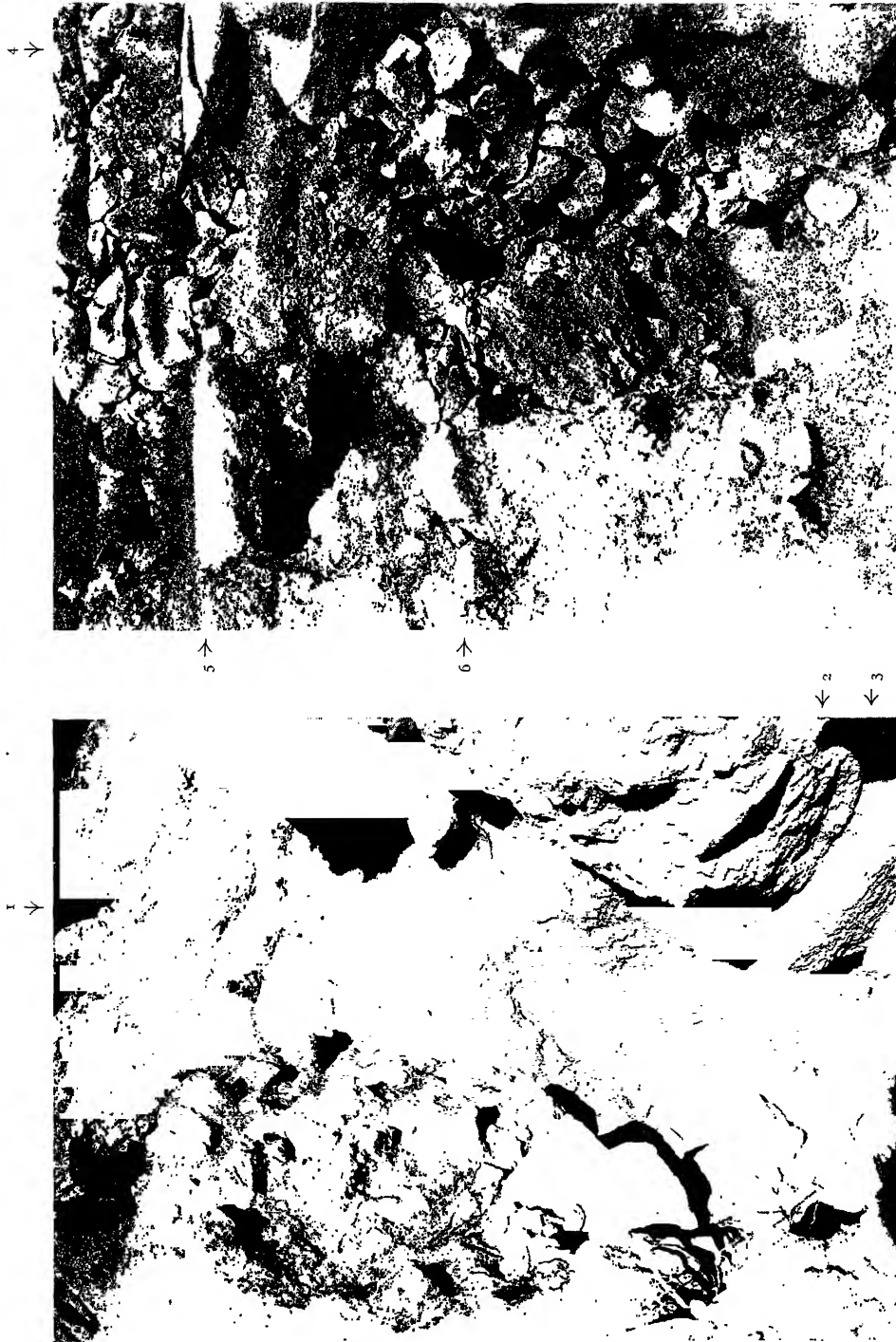
PALACE: M.H., L.H. I. AND L.H. III. VASE FRAGMENTS. (Scale *ca.* 1 : 2.)

M.H.: *a-c, e-i*, MATT-PAINTED GROUP B. II.; *d*, GROUP D. I., FROM PITHOS AREA.

L.H. I.: *p*, FROM PITHOS AREA; *q-s*, FROM WEST LOBBY OF GRAND STAIRCASE.

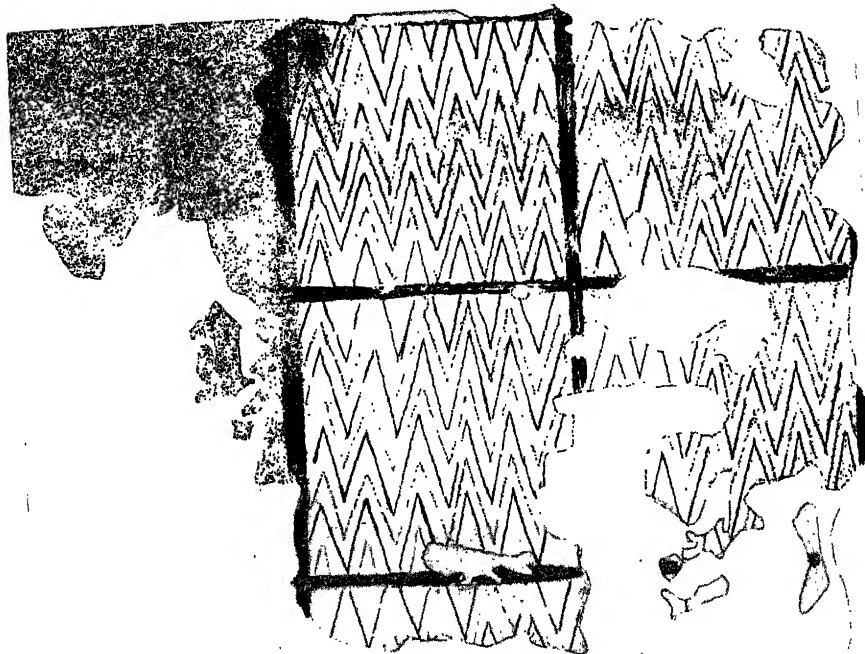
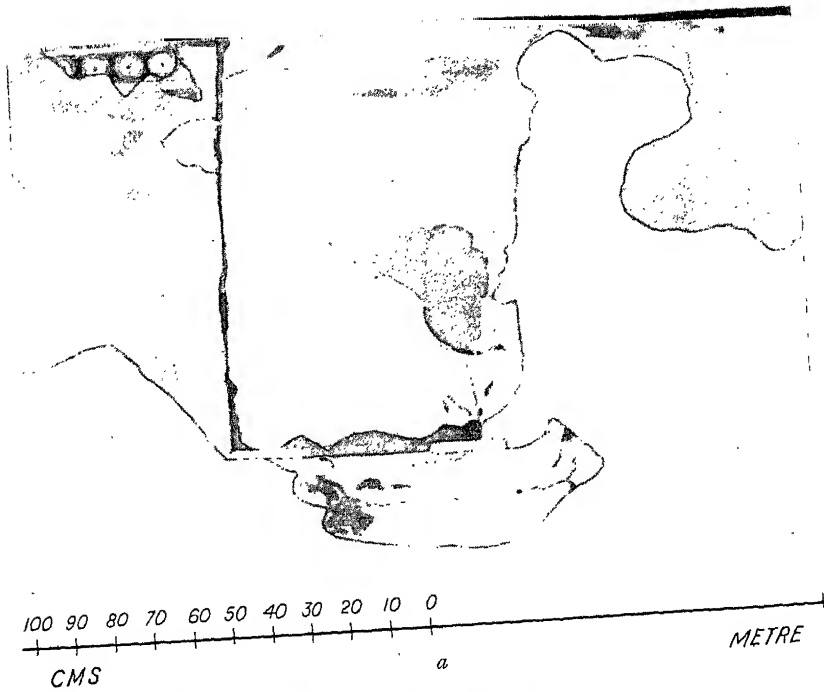
L.H. III.: *j-o*, FROM PILLAR BASEMENT.





PALACE : THE PILLAR BASEMENT.  
*a*, WESTERN PART. 1, North Wall; 2, Rubble Pillar; 3, Conglomerate Base.  
*b*, N.E. ANGLE. 4, Red Sandstone Threshold; 5, Room of Throne, E. Threshold; 6, Drain.

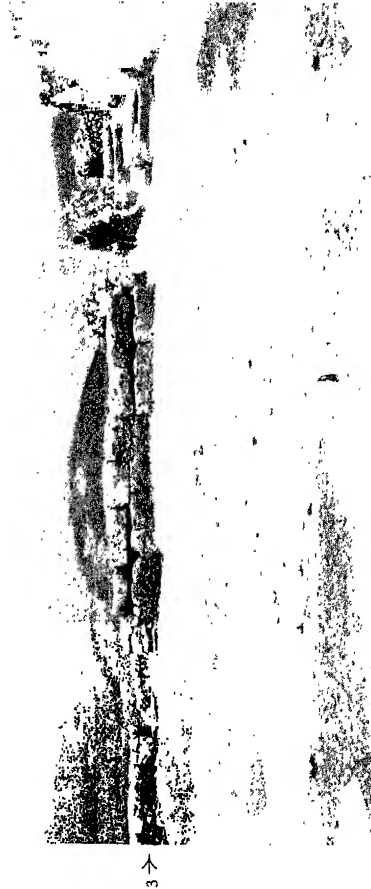




*b*

PALACE: PAINTED STUCCO FLOORS.  
*a*, FROM ROOM OF THRONE.  
*b*, FROM VESTIBULE. (Scale 1 : 20.)





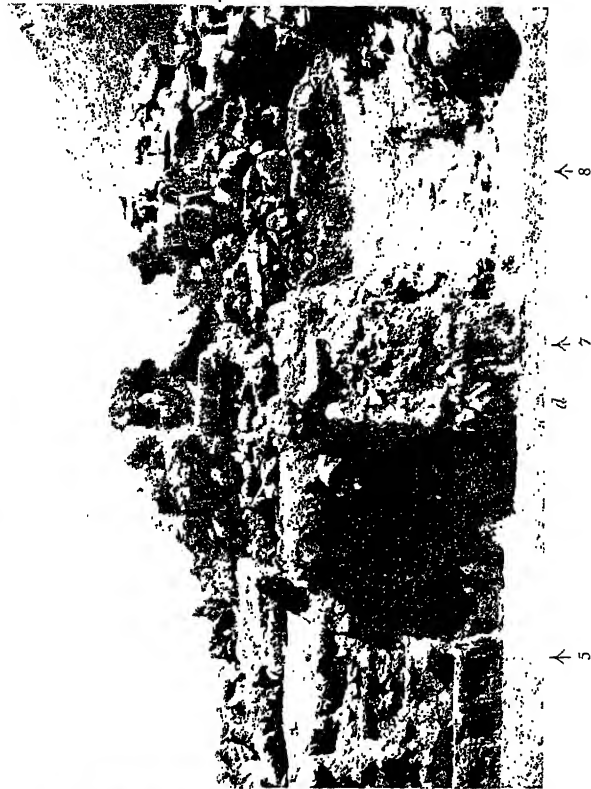
3



b



4



5

6

7

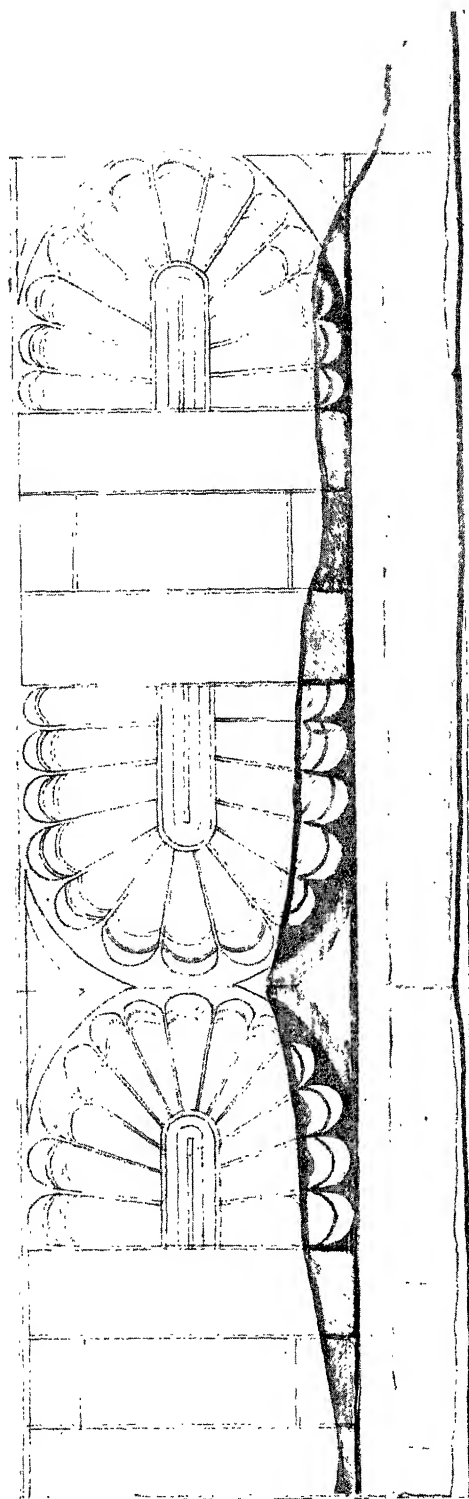
8

PALACE: THE COURT.

- a. West Side. 1, Foot of Stair; 2, West Corridor; 3, Red Sandstone Threshold.
- b. View of ARGIVE PLAIN TO S.
- c. NORTH WALL. 4, Place of Wooden Beam; 5, Earlier Wall behind; 6, N. Column Base.
- d. NORTH WALL (E. END) AND STAIRCASE. 7, Anta of Porch; 8, Staircase; 9, Sawn Threshold.

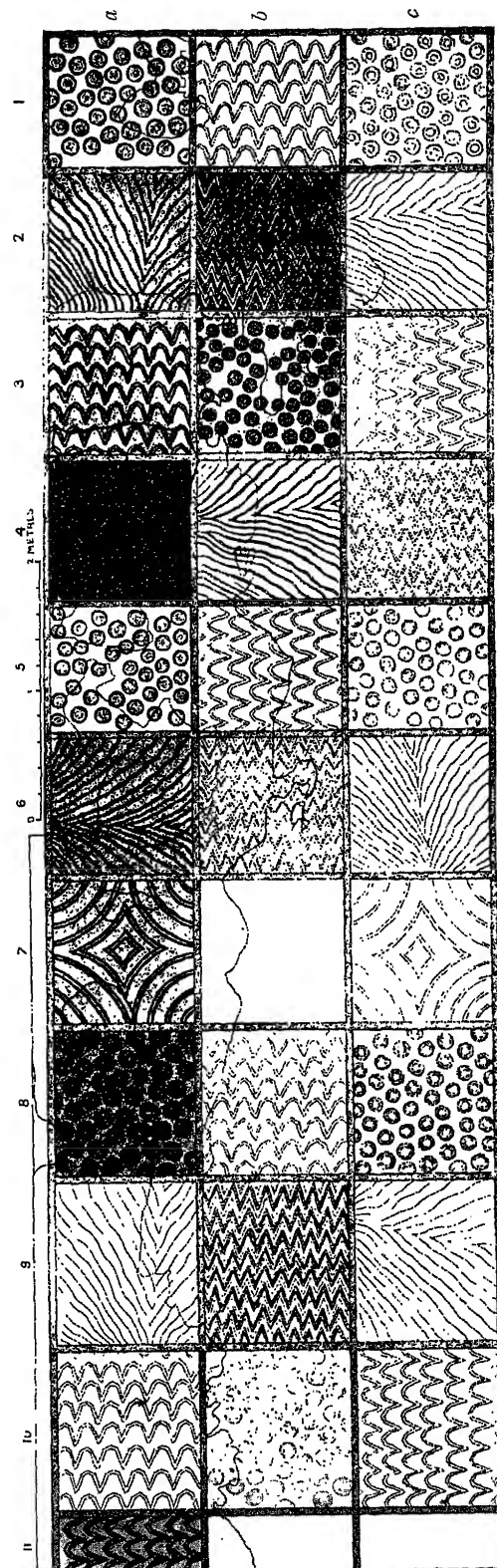






10 5 0 10 20 30 40 50 CMS

*a*



*b*

PALACE: PAINTED STUCCO.

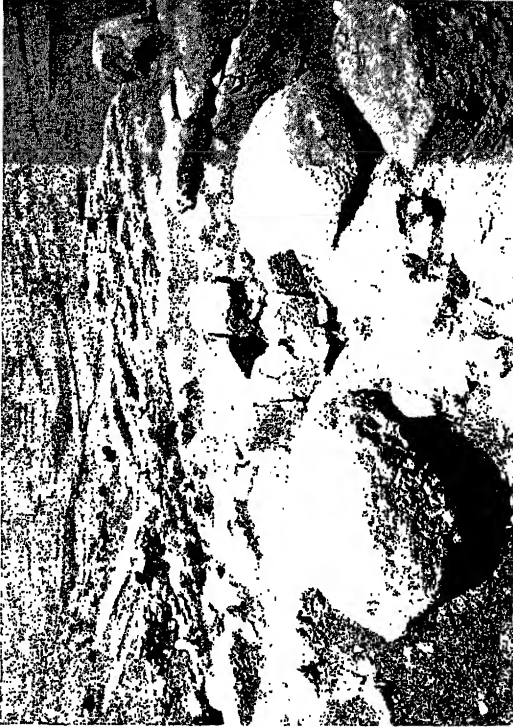
*a*, DADO OF PORCH.

*b*, RECONSTRUCTION OF FLOOR ON N. SIDE OF COURT.

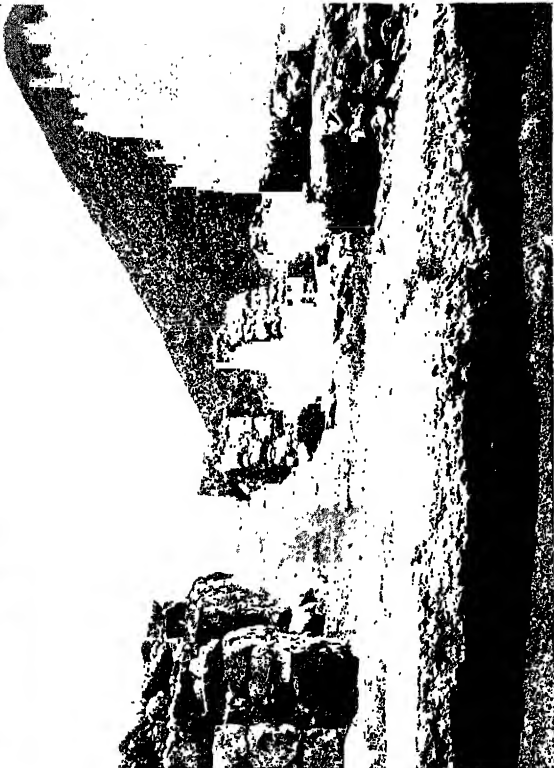


1  
↓

b



a



3  
↑

6  
↑

5  
↑

4  
↑

6  
↑

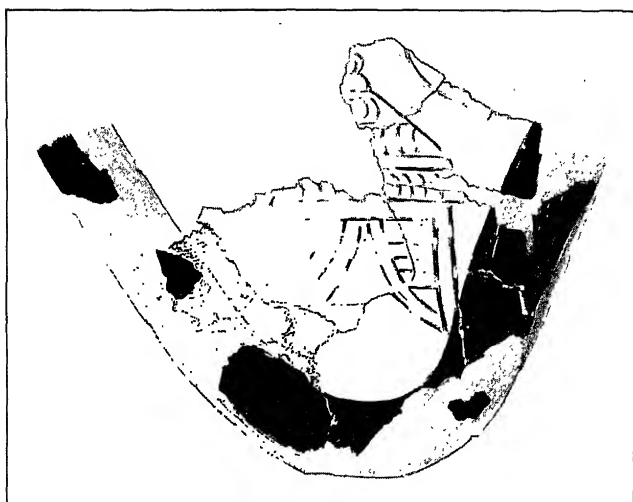


d

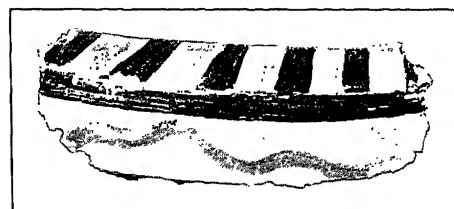
PALACE: WESTERN PORTAL, N.W. ANGLE AND RED BATH.

a, THE RED BATH FROM S. 1, DRAIN.  
b, COLUMN BASES BY PROVISION FROM E.  
c, WESTERN PORTAL FROM W. 2, CONGLOMERATE THRESHOLD; 3, S. CORRIDOR; 4, W. DITTO; 5, CLOSET UNDER STAIRS.  
d, GUARDROOM FROM W. 6, SUPPORTING WALL AT N. END OF DORIC TEMPLE.

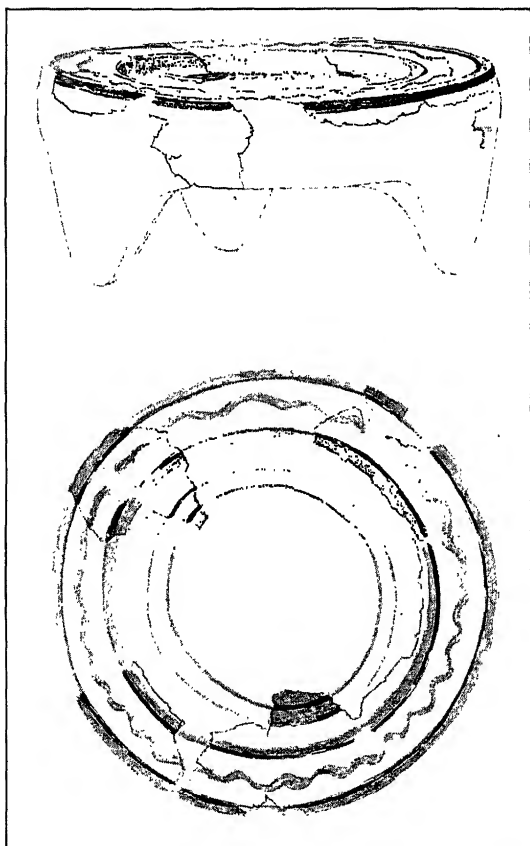




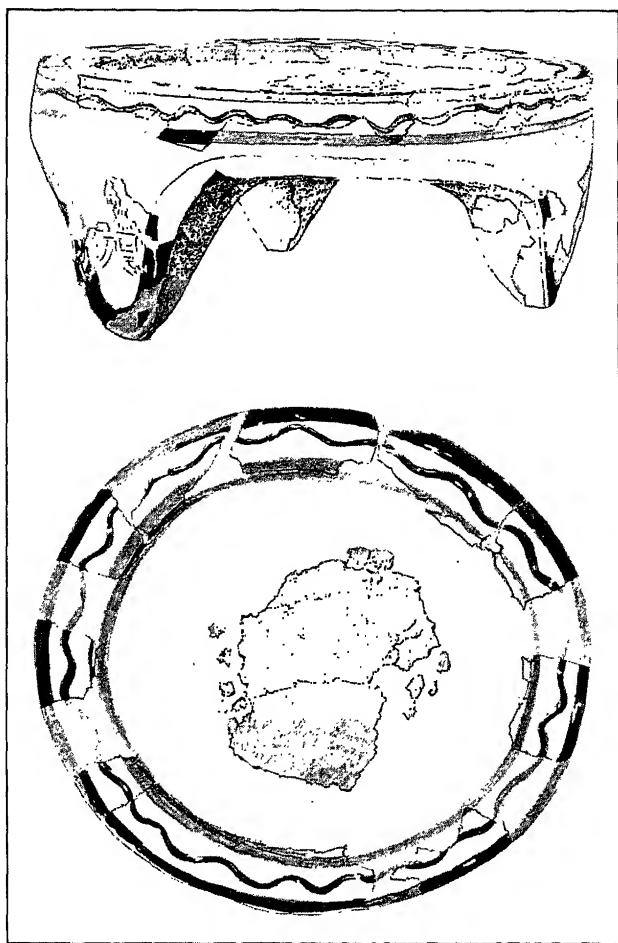
*a*



*c*



*b*

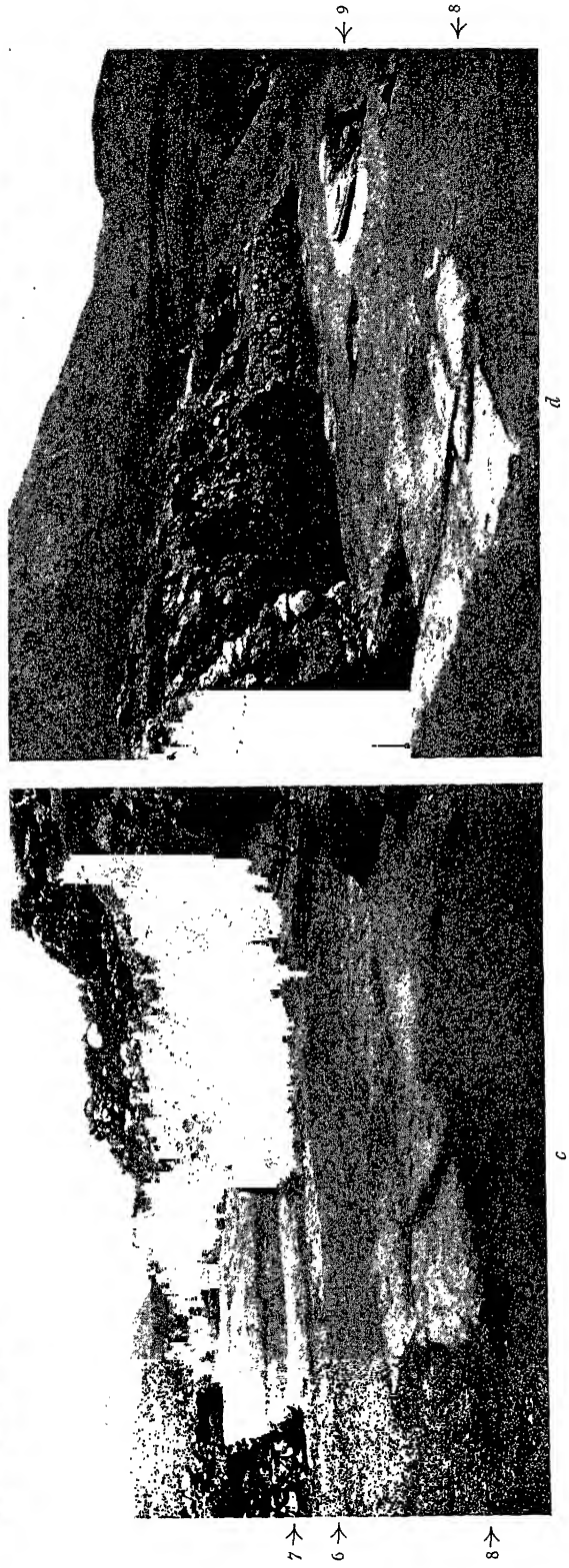
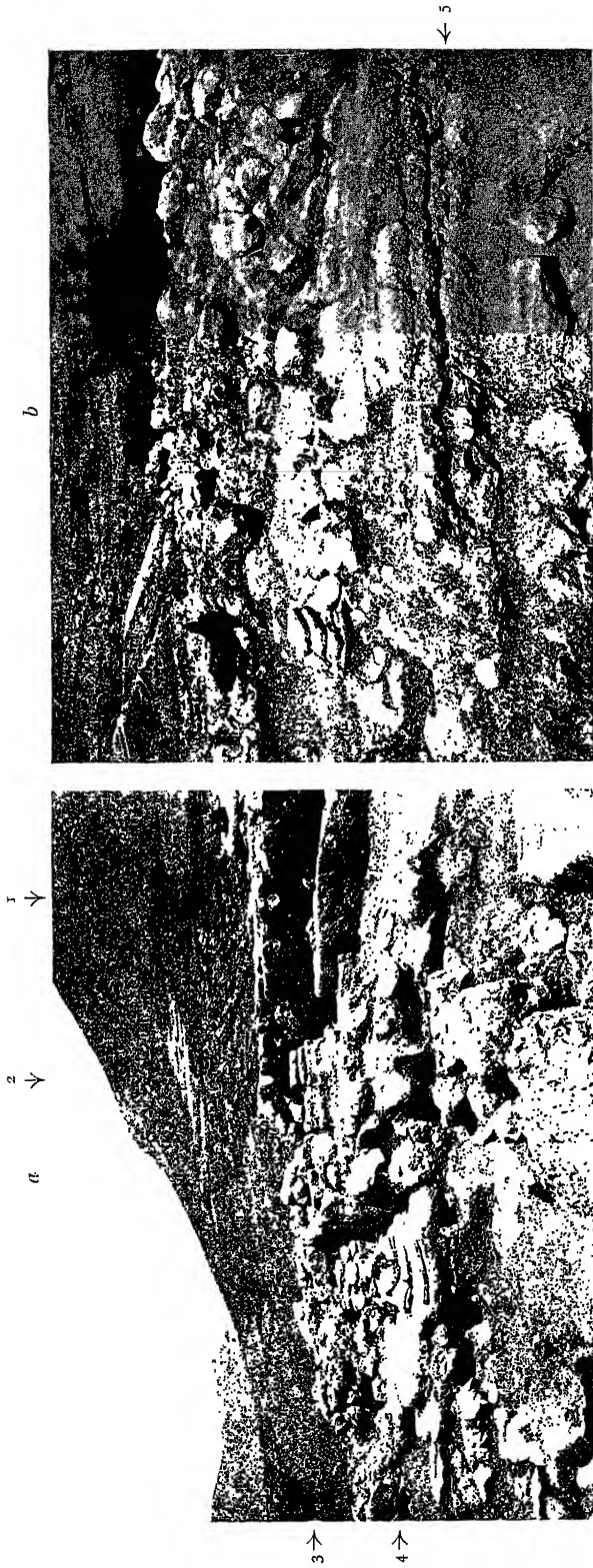


*d*

PALACE: STUCCO ALTARS.

- a*, LEG OF ALTAR I (*d*) FROM SHRINE. (Scale 1 : 2.)  
*b*, ALTAR III. FROM TSOUNTAS' EXCAVATIONS. (Scale 1 : 6.)  
*c*, FRAGMENT OF ALTAR II. FROM SHRINE. (Scale 1 : 3.)  
*d*, ALTAR I. FROM SHRINE. (Scale 1 : 6.)





PALACE : SHRINE AND MEGARON.  
*a*, SHRINE AND CHAMBER OF PITHOI. 1, Doric Temple Foundation; 2, West Wall, and 3, Cement Floor of Shrine; 4, Pithoi.  
*b*, CRUDE BRICK WALL OF SHRINE. 5, Crude Bricks.  
*c*, VESTIBULE, PORCH AND COURT. 6, Threshold from Porch; 7, Threshold from Vestibule; 8, do. to Megaron.  
*d*, MEGARON FROM VESTIBULE. 9, Hearth; 8, Threshold to Megaron.



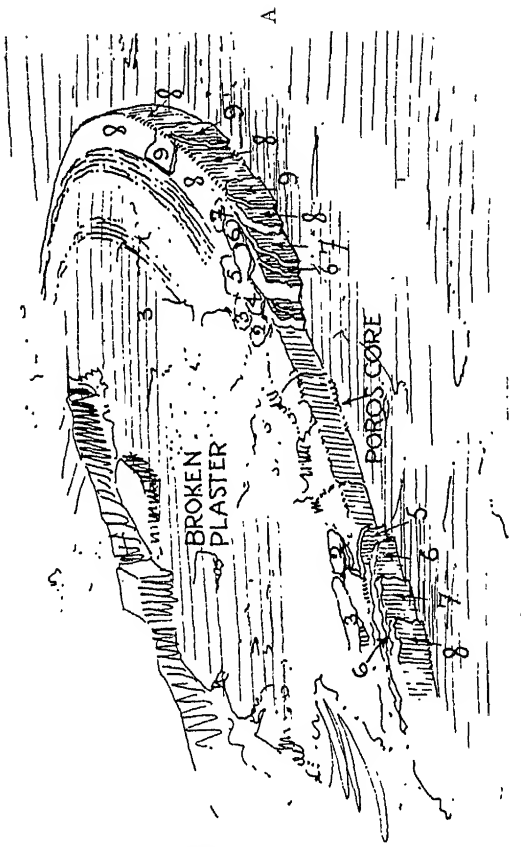




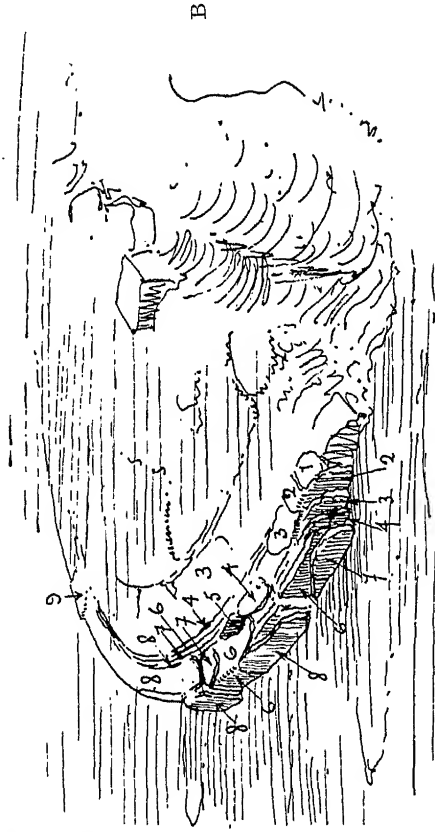
A



B



A

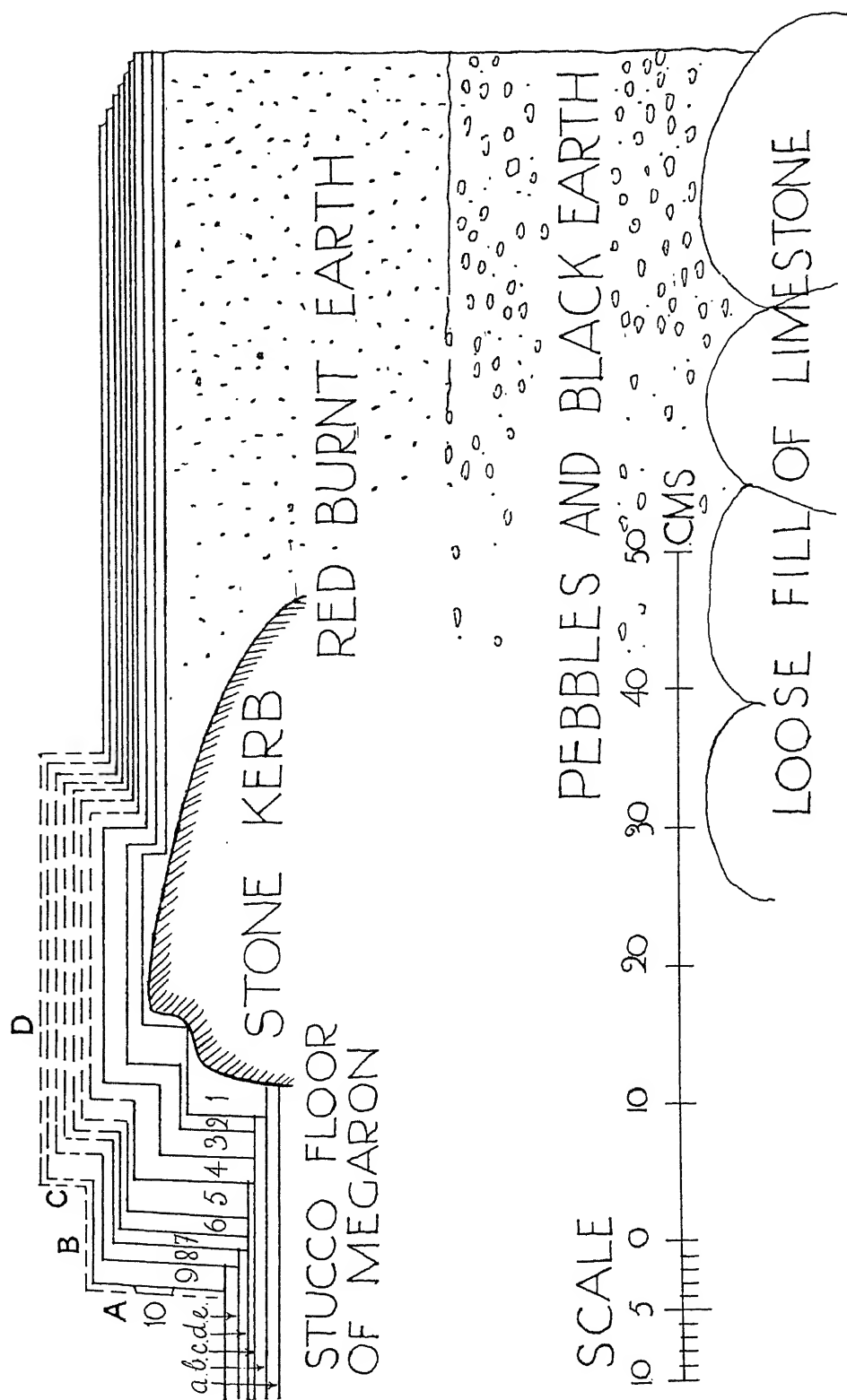


B

PALACE : HEARTH IN MEGARON.

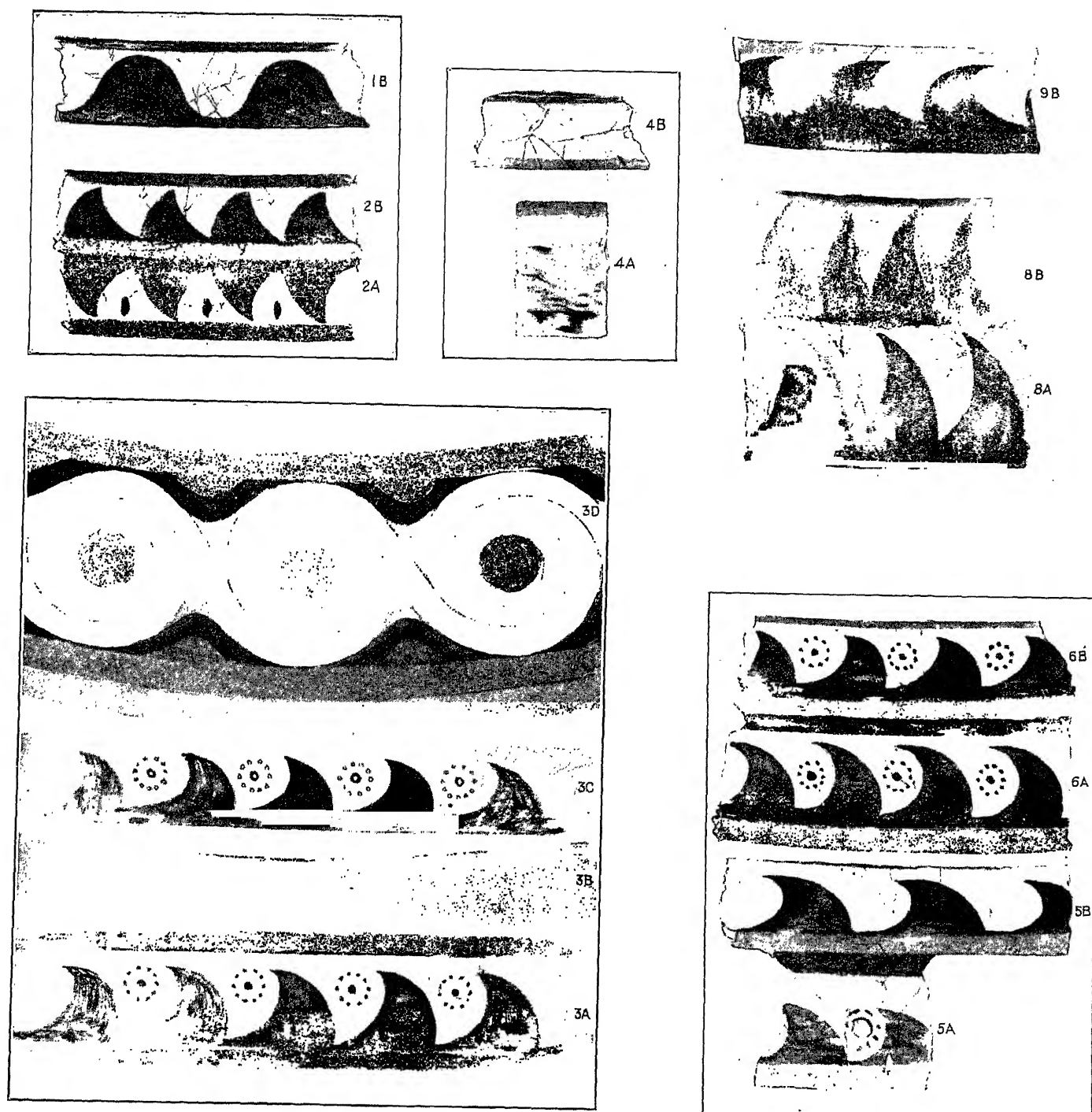
A, FROM E. } Numbers indicate the successive Layers of painted Stucco.  
B, FROM W. }





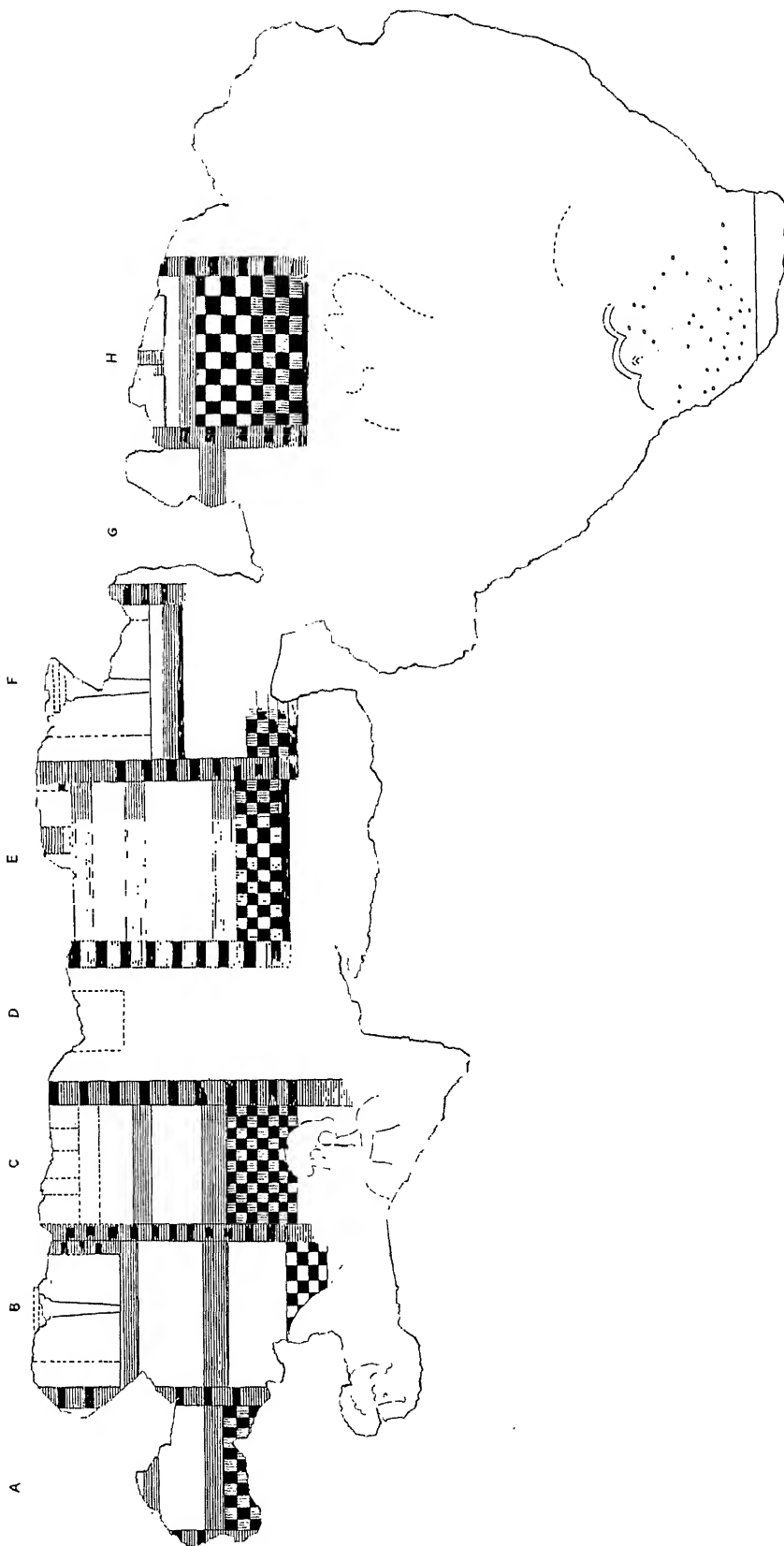
PALACE : MEGARON. SECTION ACROSS HEARTH.





PALACE: MEGARON. PATTERNS PAINTED ON SUCCESSIVE LAYERS OF STUCCO HEARTH. (Scale 1 : 4.)





PALACE : SKETCH RECONSTRUCTION OF FRESCO FROM MEGARON. (Scale 1 : 3.)







PALACE: FRESCO FROM MEGARON. (Scale 1:3.)





*a*

*a.* CYCLOPEAN TOMB : DROMOS AND FAÇADE.

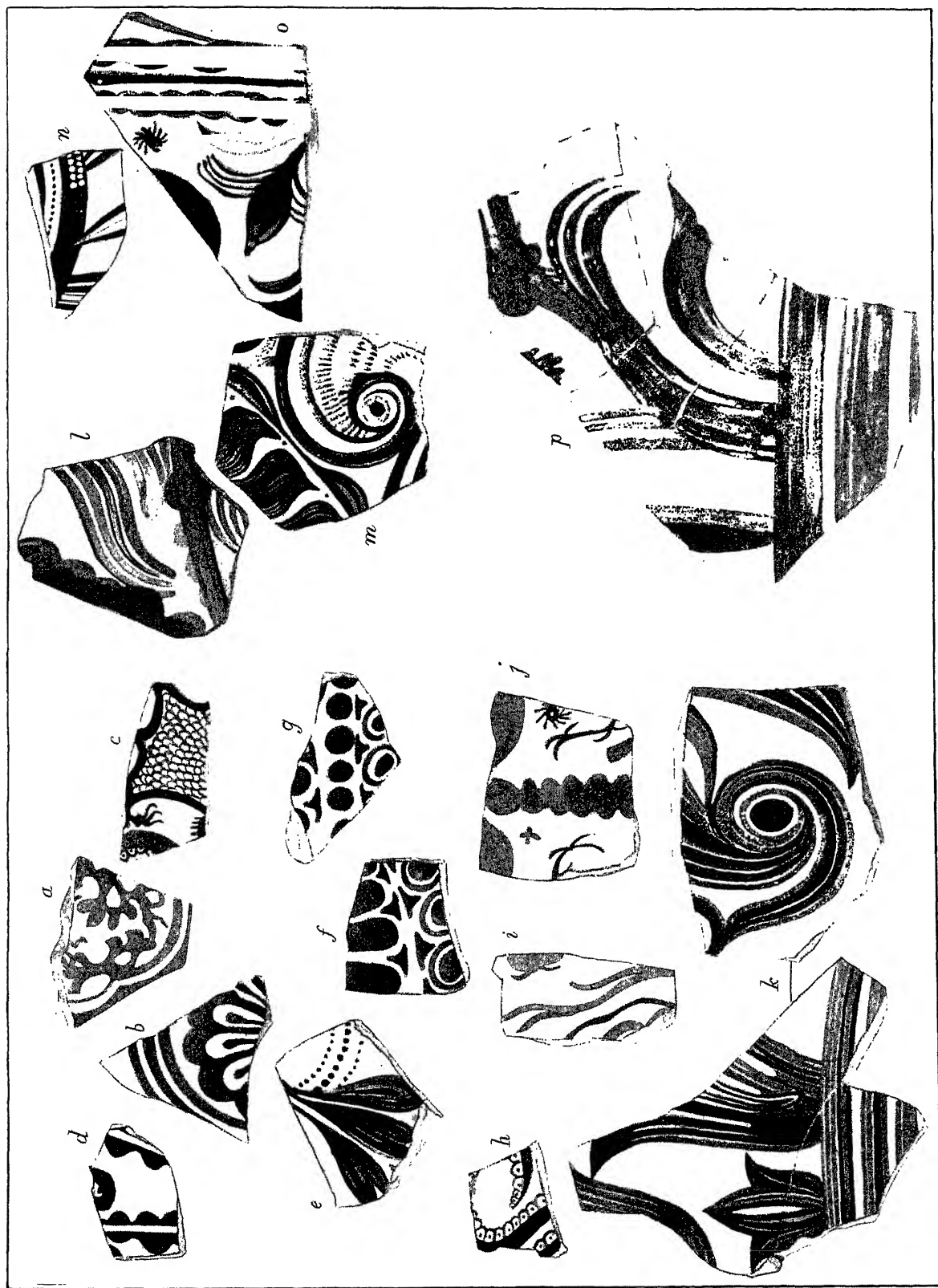


*b*

*b.* EPANO PHOURNOS : FAÇADE.

THOLOS TOMBS.





POTTERY FROM THOLOS TOMBS. (Scale *ca.* 1 : 2.)  
 LION TOMB, *a-d*; KATO PHOURNOS, *e-k*; GENII, *l-m*; CYCLOPEAN, *n-o*; AEGISTHUS, *p*.



CONGLOMERATE  
LIMESTONE • ELEVATION  
LIMESTONE • SECTION  
POROS  
ROCK

# SECTION C·D

BOTTOM OF DRAIN

SECTION A.B SHOWING INTERIOR ELEVATION OF  
DOOR & OPENING

# SCALE OF METRES

0 1 2 3 4 5 6 7 8 9 10

PLAN

DRAIN

Z

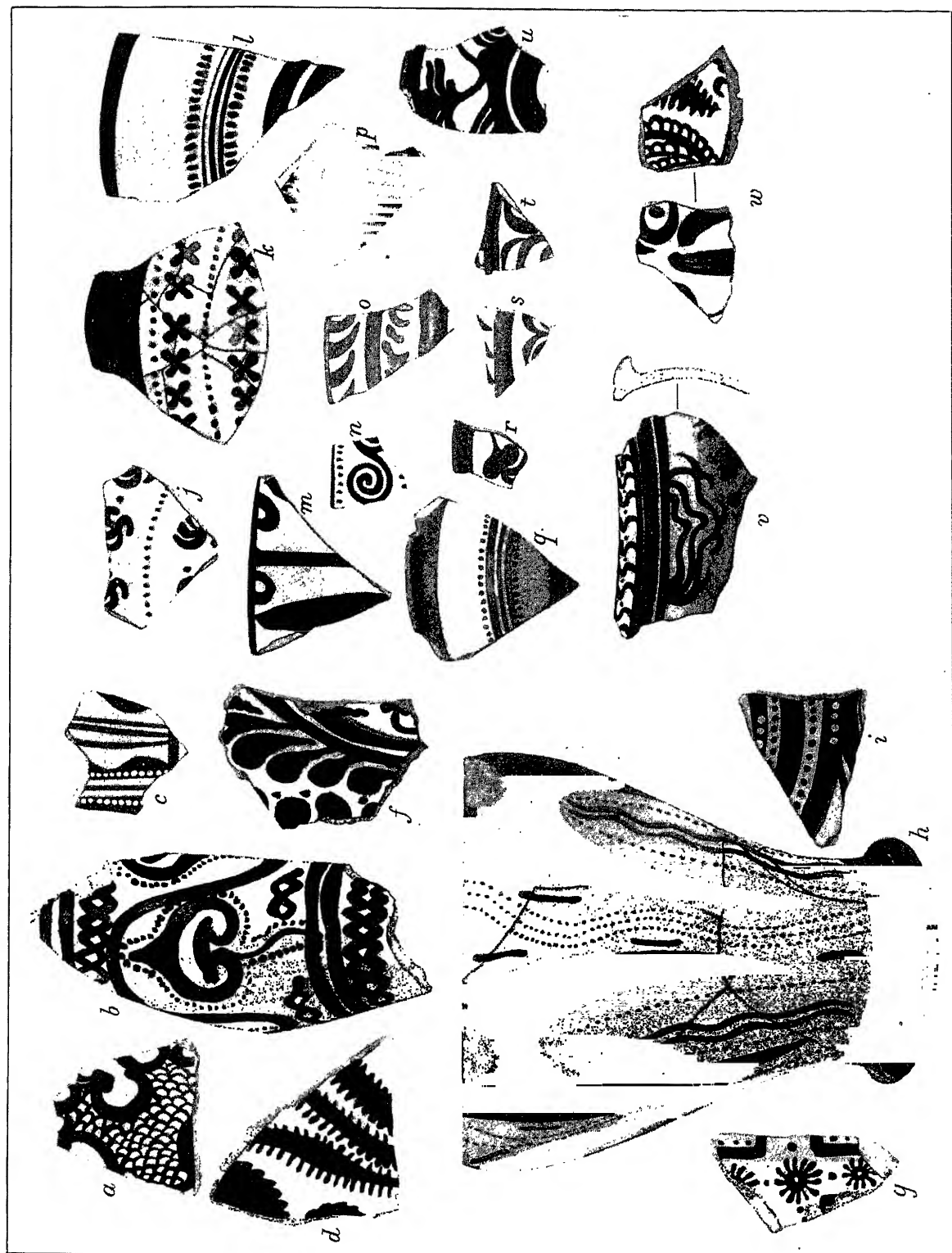
UNEXCAVATED  
FALLEN MATERIAL  
INDICATED ON  
SECTION

POE TUNG DEL

TOMB OF AEGISTHUS: PLAN AND SECTIONS.

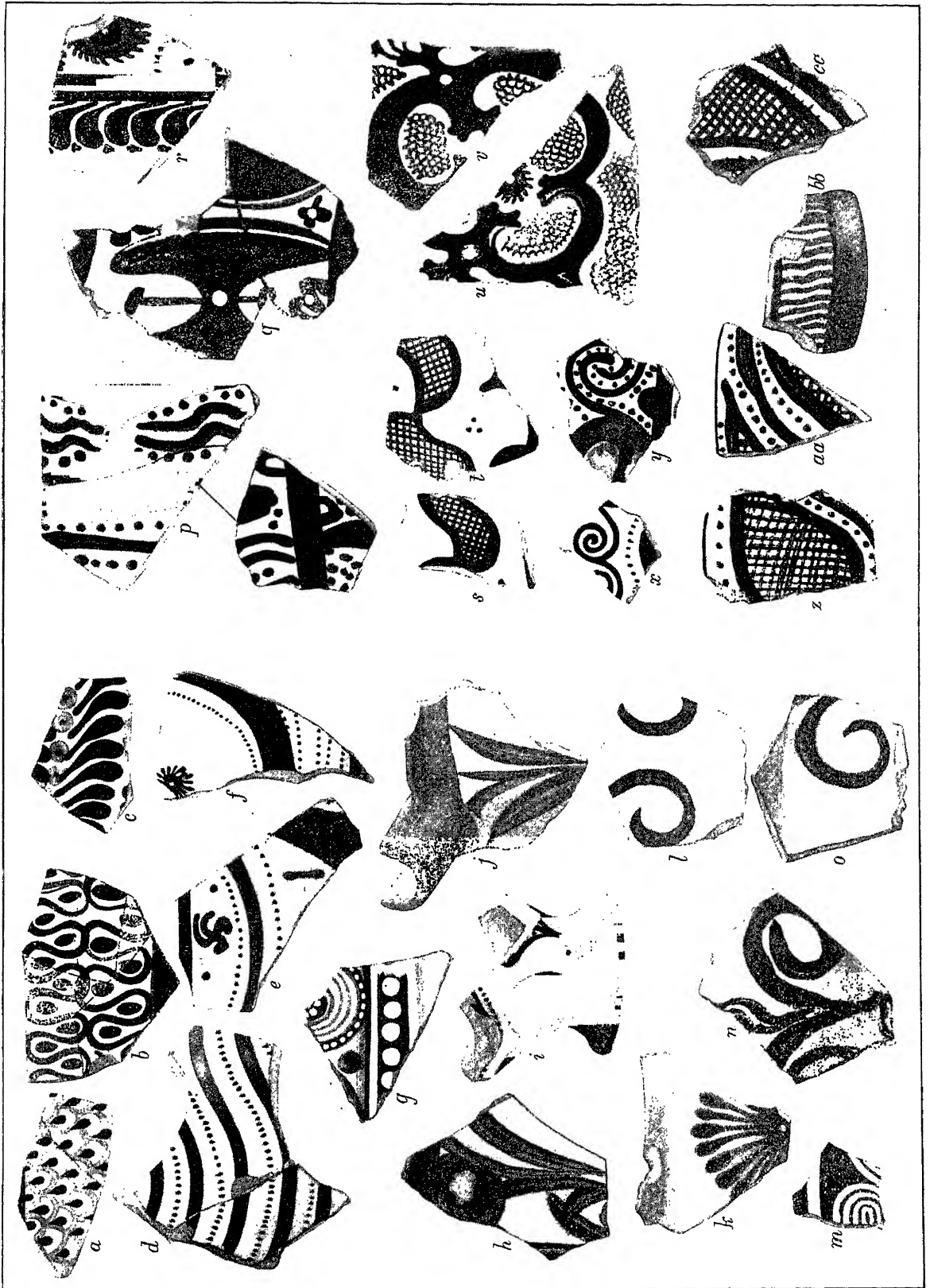






TOMB OF AEGISTHUS: L.H. I. AND L.H. II. POTTERY. (Scale *ca.* 1:2.)





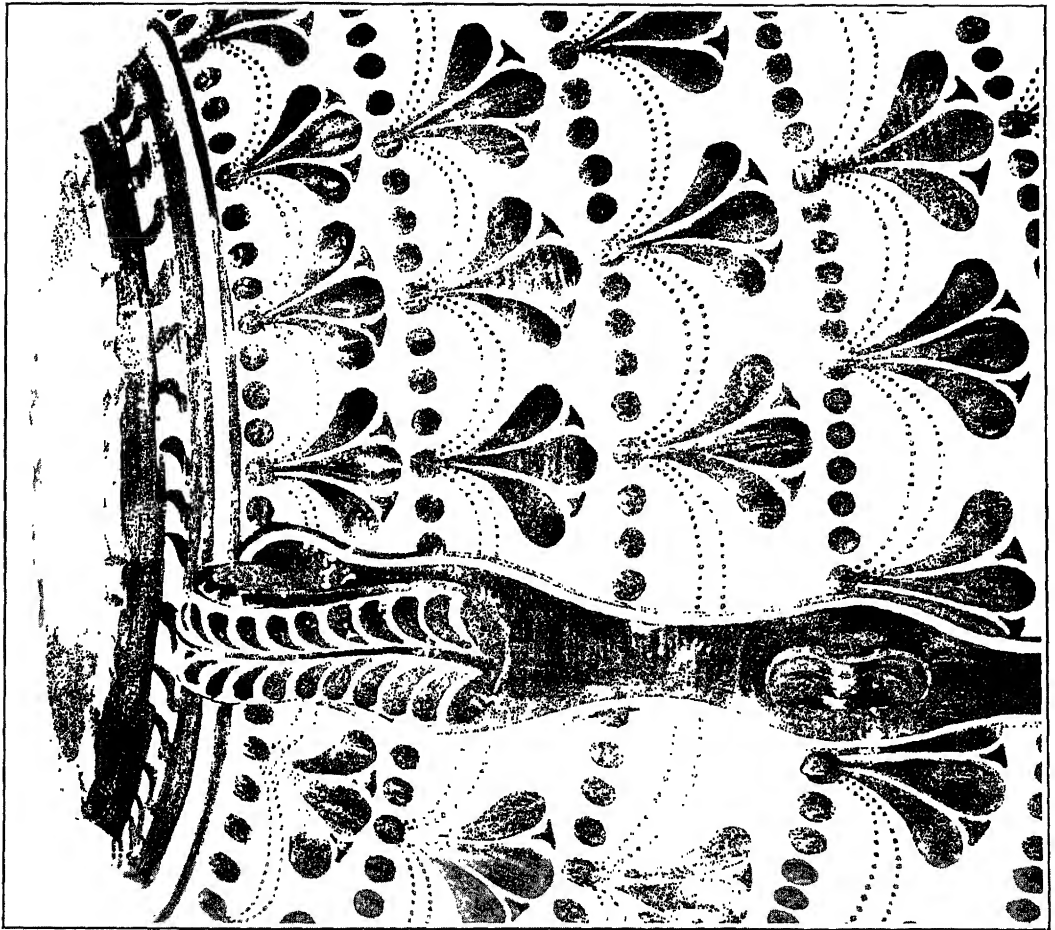
TOMB OF AEGISTHUS: M.H. (m) L.H. I. AND L.H. II. POTTERY. (Scale ca. 1:2.)



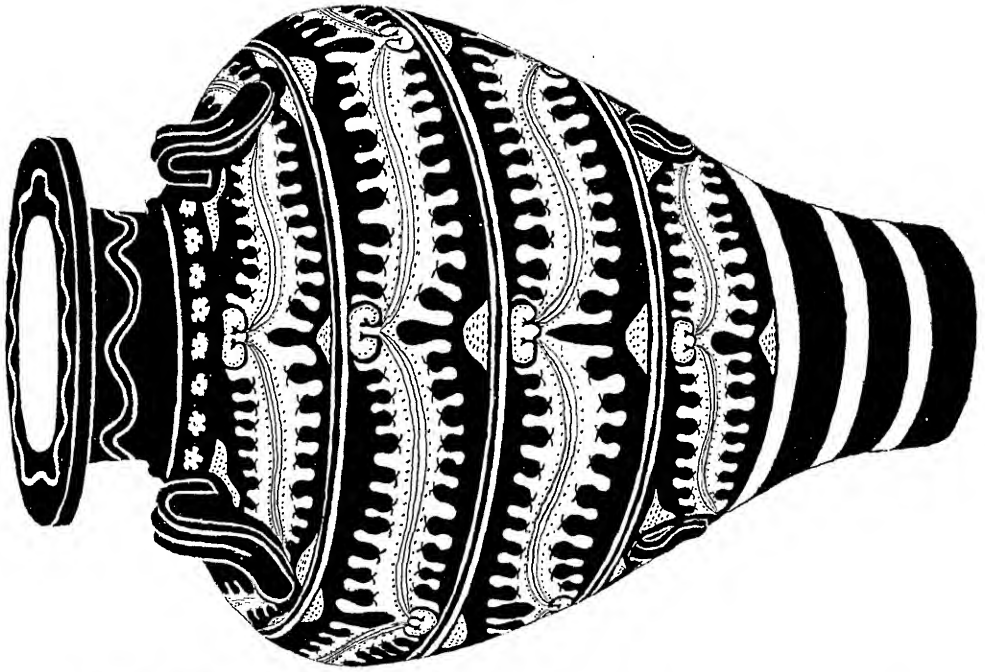


TOMB OF AEGISTHUS: FRAGMENTS OF PALACE STYLE AMPHORAE. (Scale ca. 1:2.)





*a*

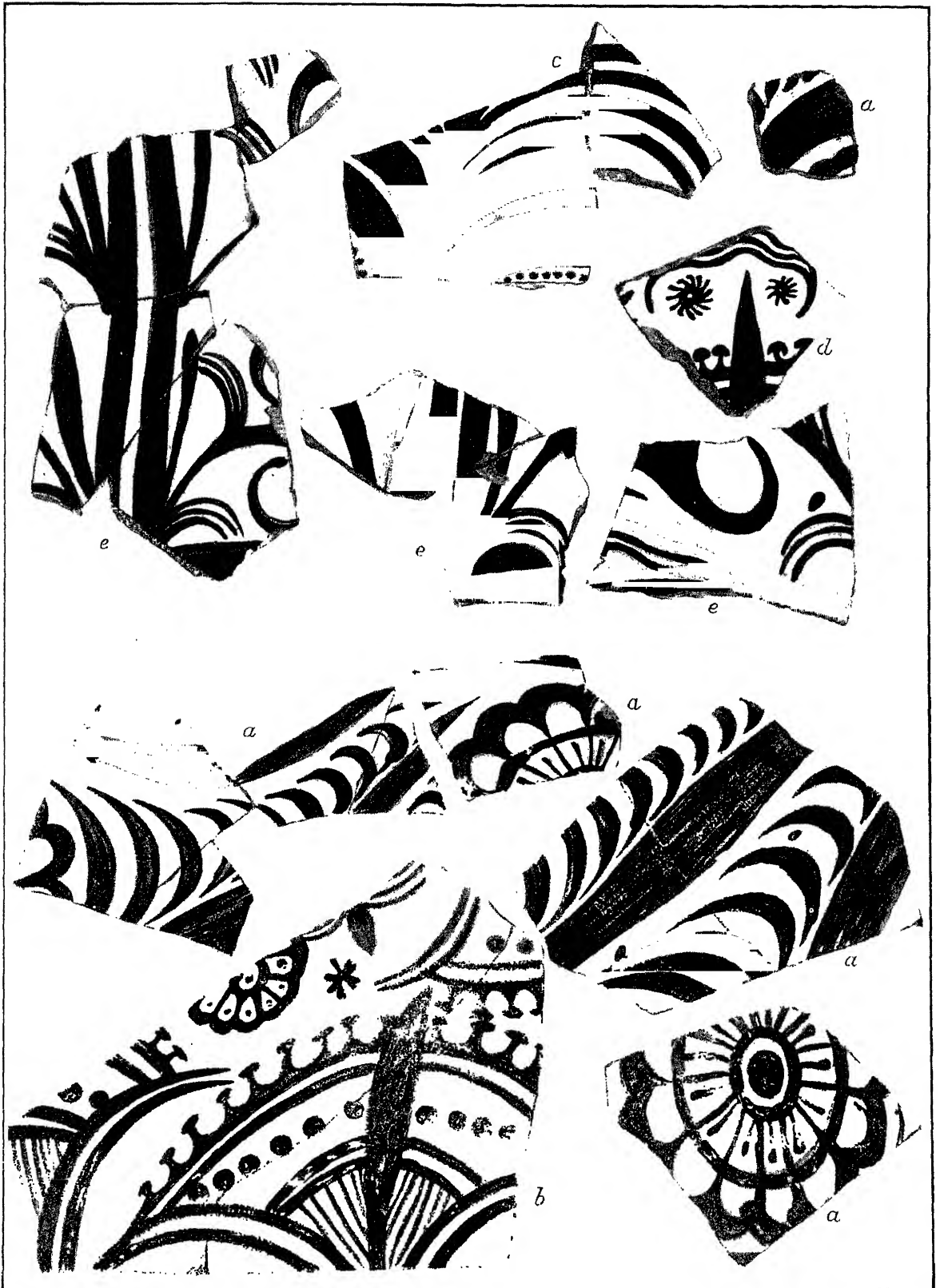


*b*

TOMB OF AEGISTHUS: RECONSTRUCTION OF PATTERNS OF PALACE STYLE AMPHORAE. (Scales *a*, 3 : 8; *b*, *ca.* 1 : 8.)

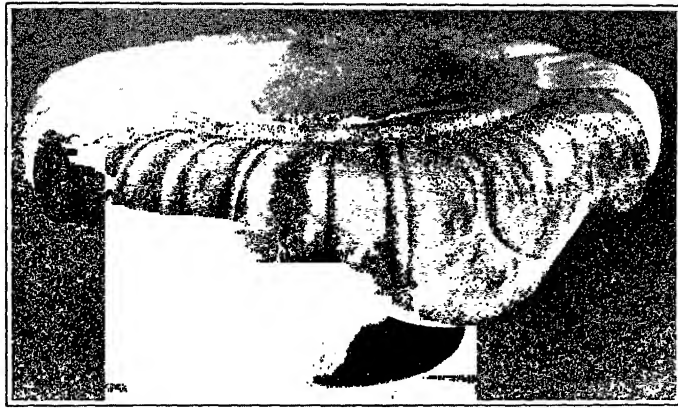






TOMB OF AEGISTHUS: FRAGMENTS OF PALACE STYLE AMPHORAE. (Scale *ca.* 1 : 2.)





*a*

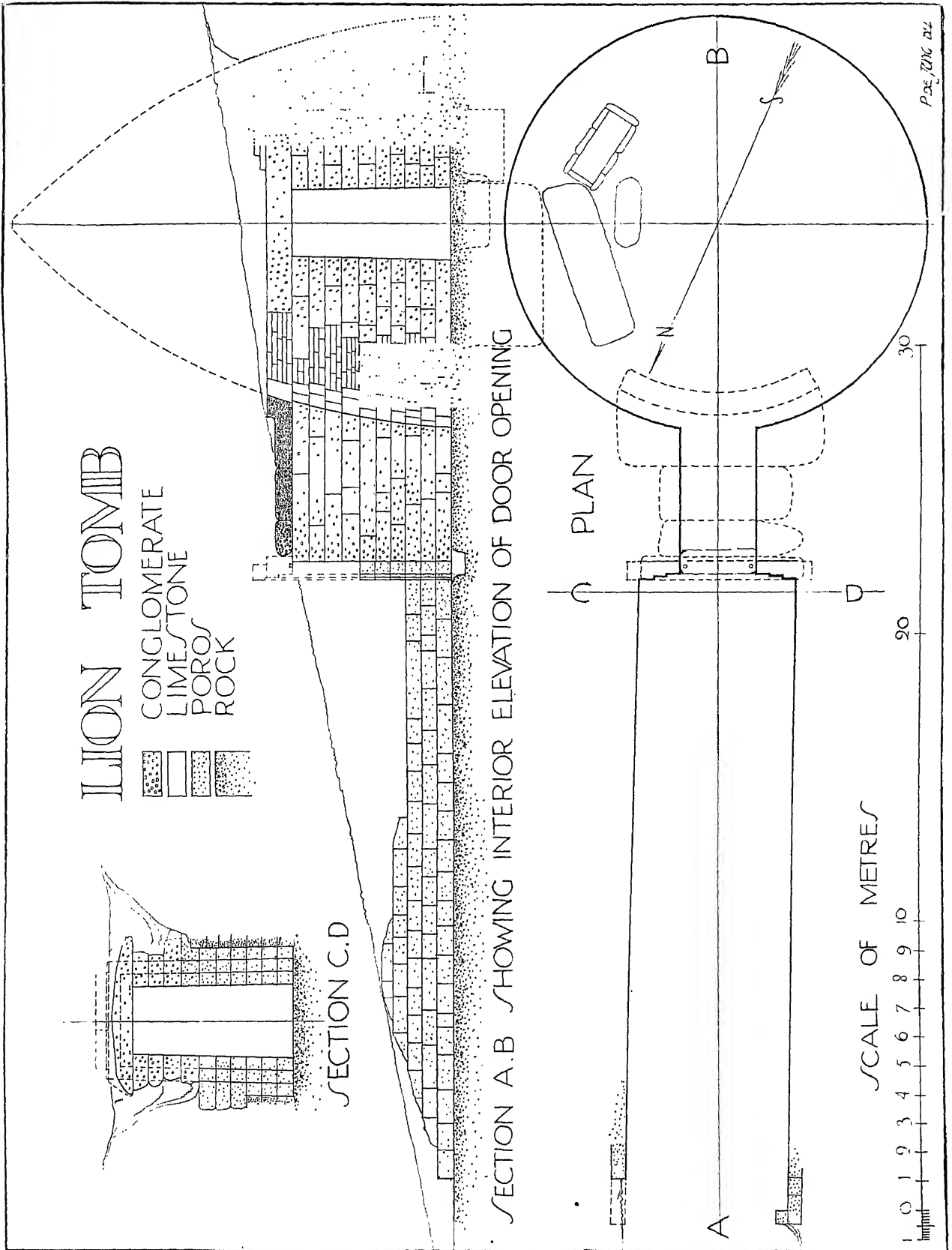
LION TOMB: MARBLE LAMP FOUND BY TSOUNTAS IN DROMOS. (Scale 1:4.)



*b*

TOMB OF AEGISTHUS: RECONSTRUCTED FRAGMENT OF L.H. II. BOWL. (Scale 1:2.)

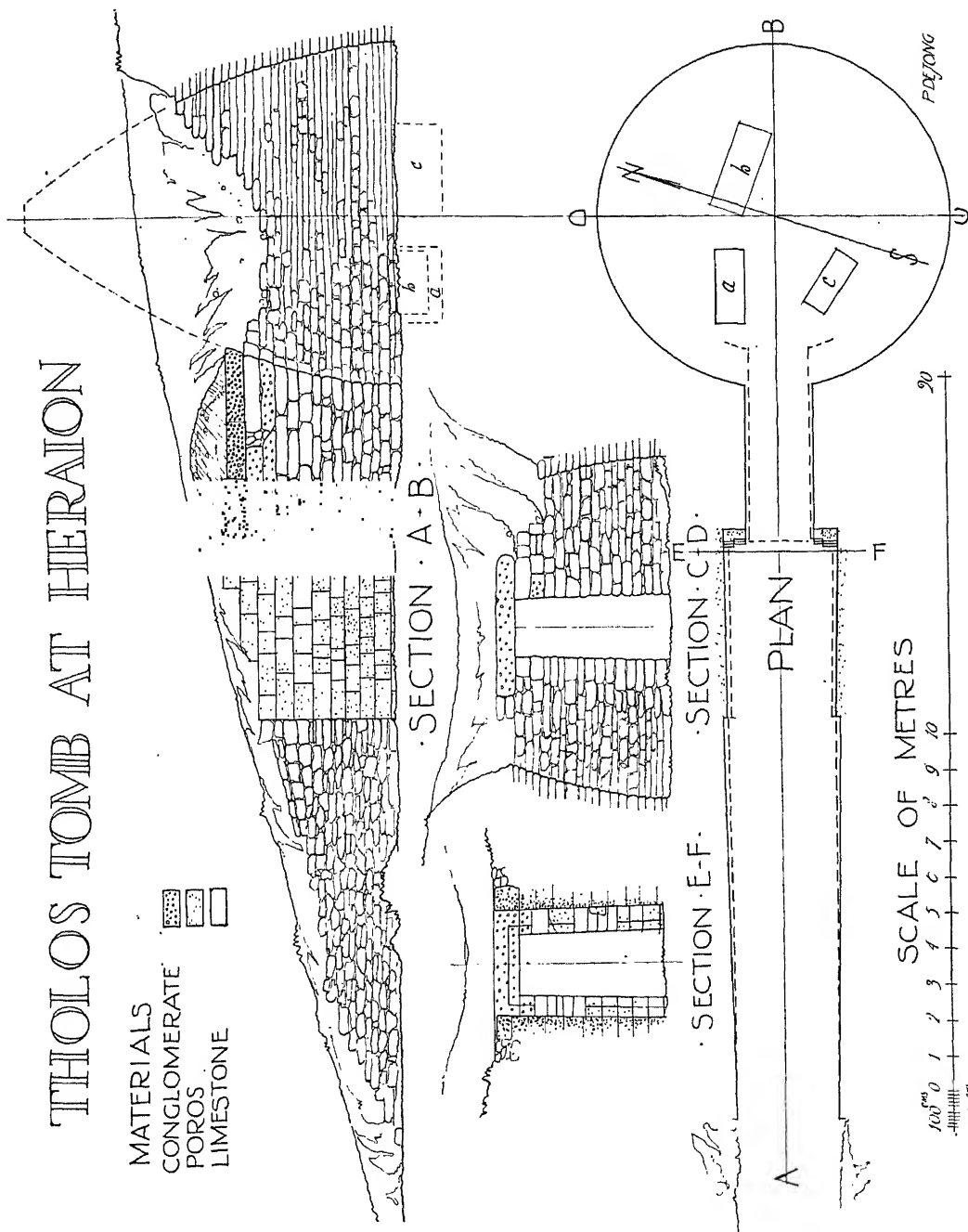






# THOLOS TOMB AT HERAION

## MATERIALS



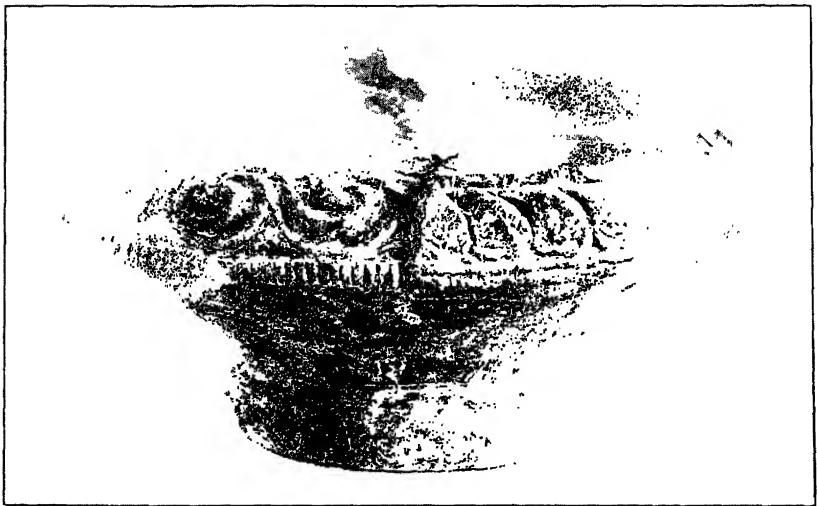
HERAION TOMB: PLAN AND SECTIONS.







*a*

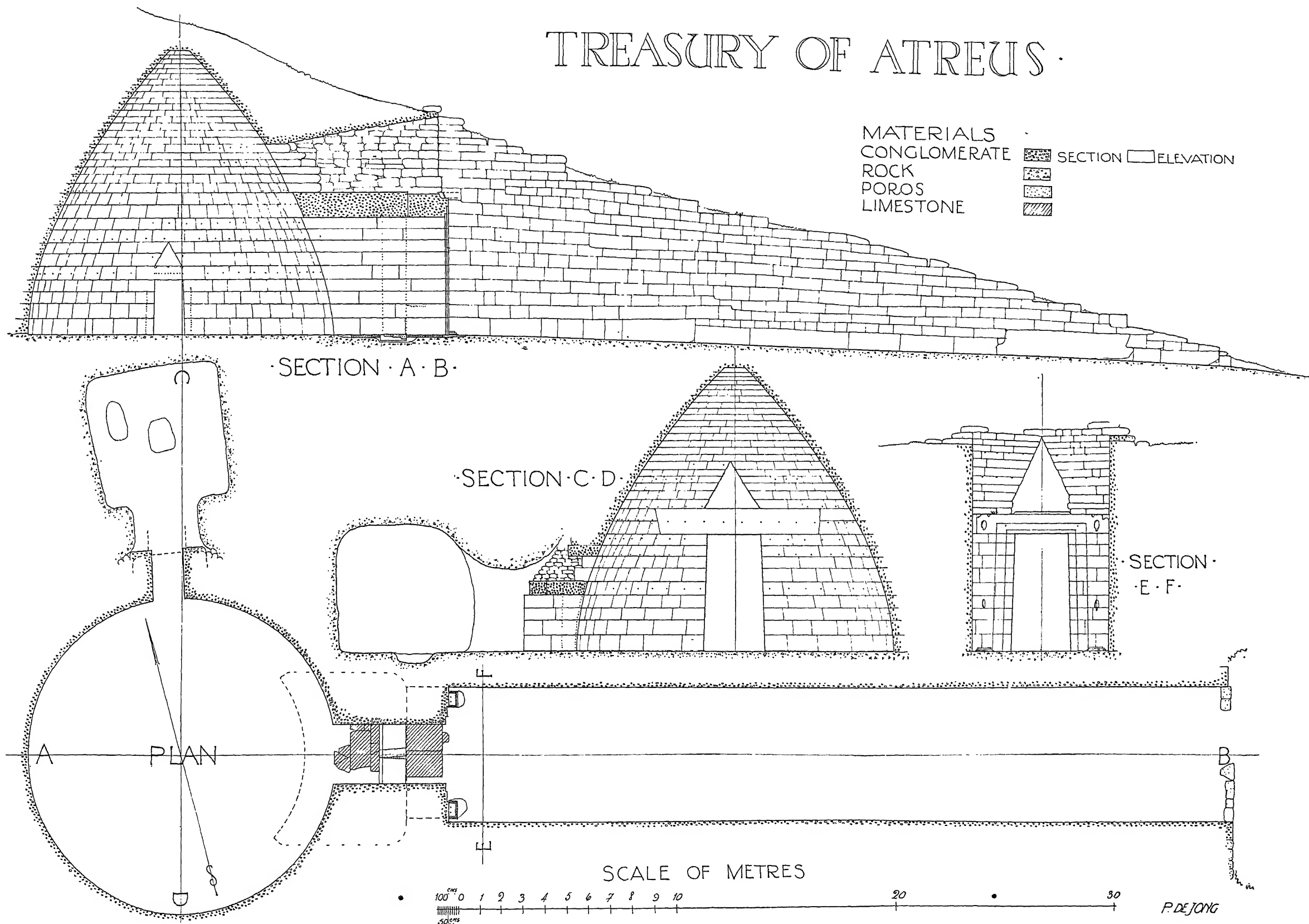


*b*

HERAION TOMB: *a*, ALABASTER VASE. (Scale 1:4.)  
*b*, STEATITE LAMP. (Scale 1:3.)



# TREASURY OF ATREUS.

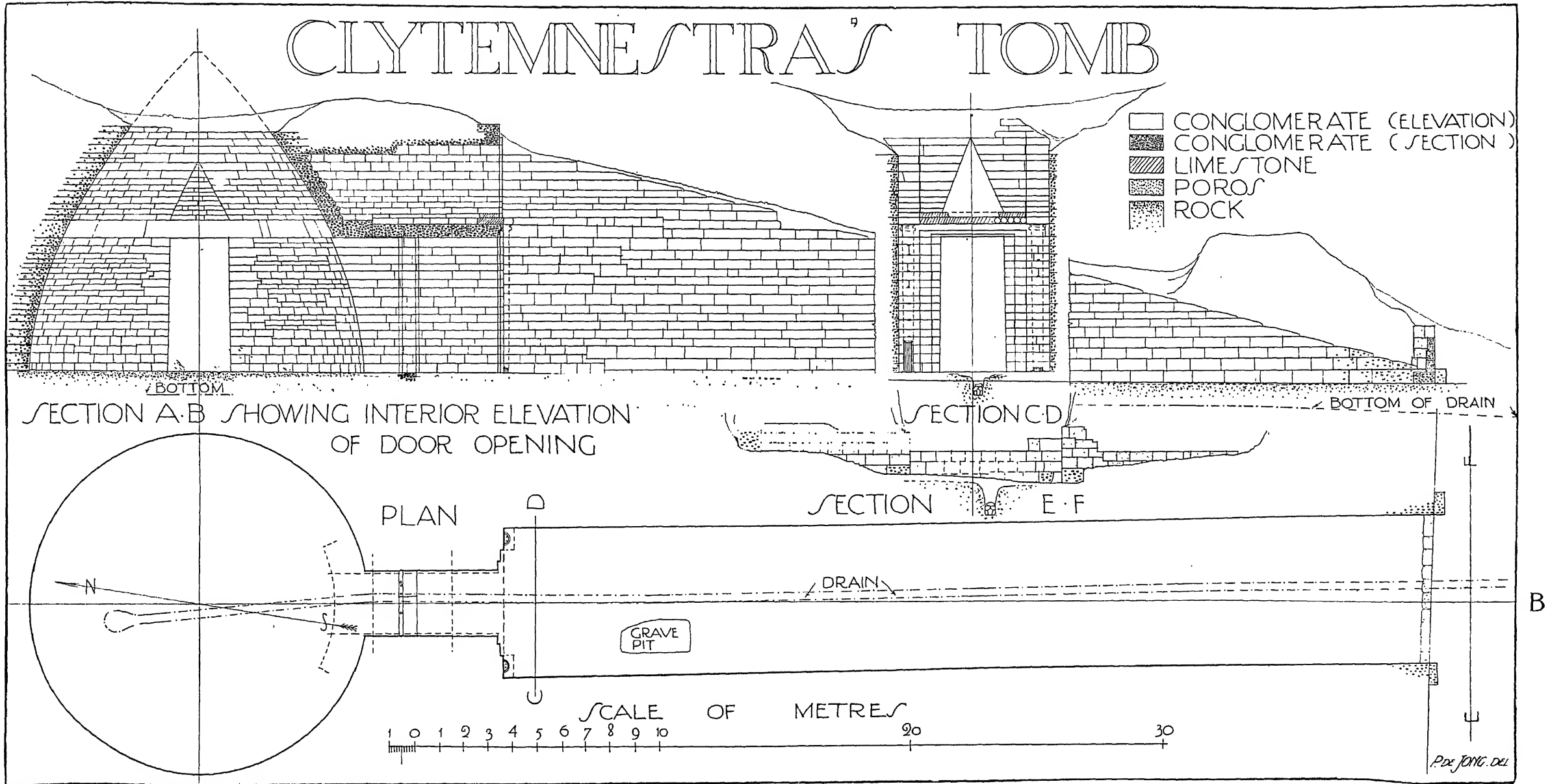


TREASURY OF ATREUS: PLAN AND SECTIONS.

•

•

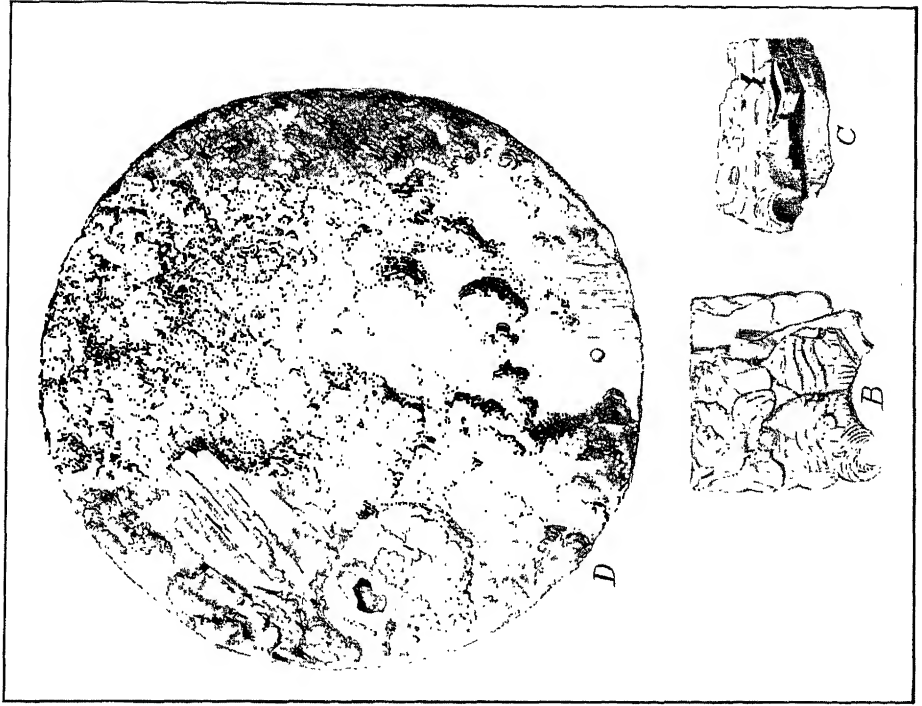
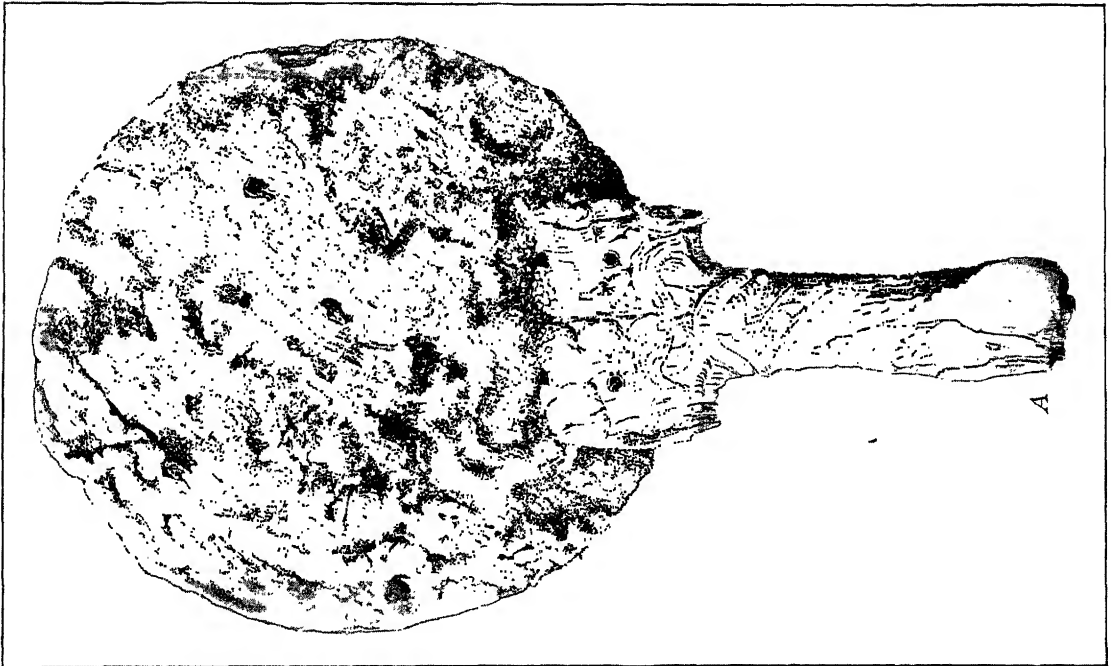
# CLYTEMNESTRA'S TOMB



TOMB OF CLYTEMNESTRA: PLAN AND SECTIONS.

•

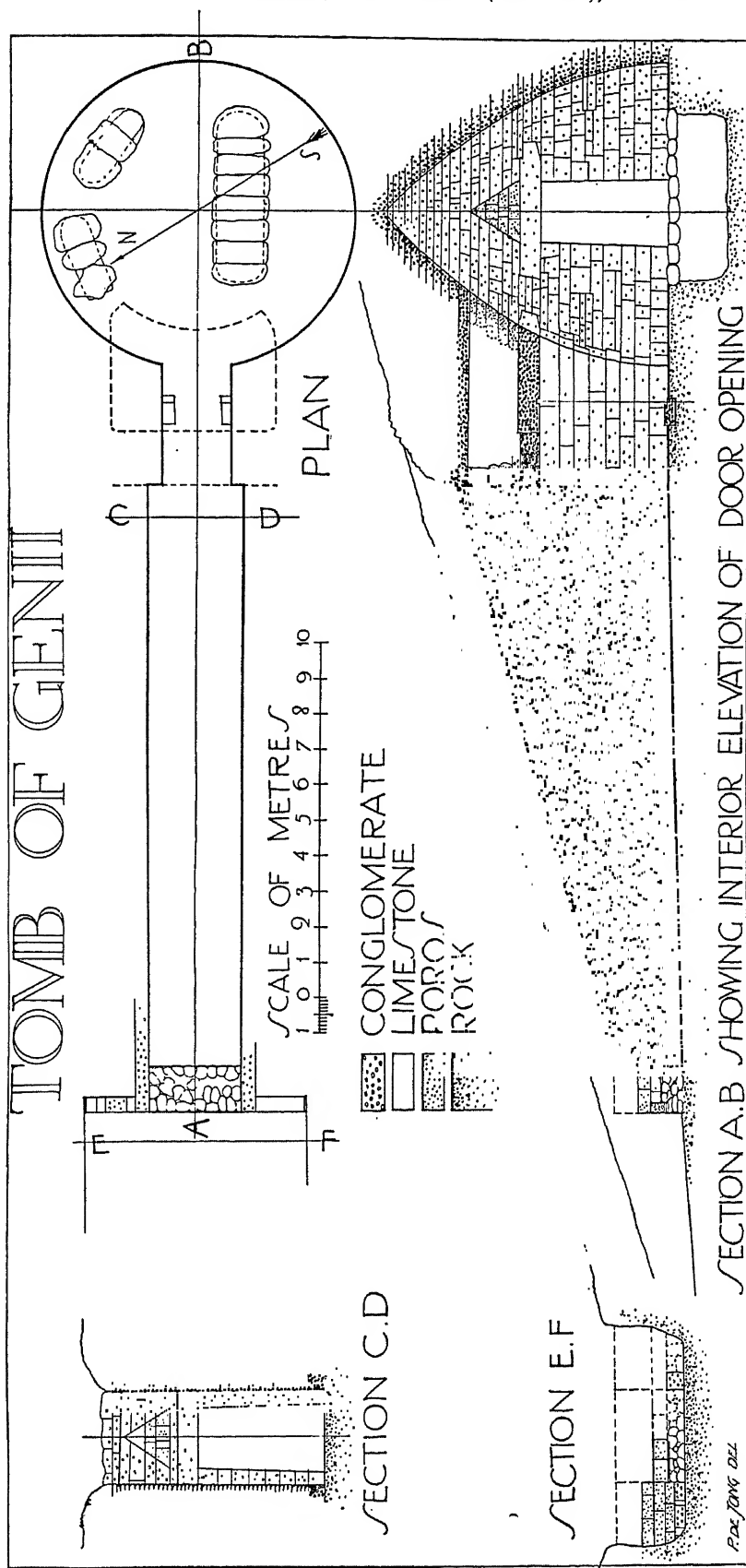
•



TOMB OF CLYTEMNESTRA: BRONZE MIRRORS WITH IVORY HANDLES FROM GRAVE-PIT IN DROMOS. (Scale 1 : 2.)  
FROM TSOUNTAS' EXCAVATIONS. Athens Museum.

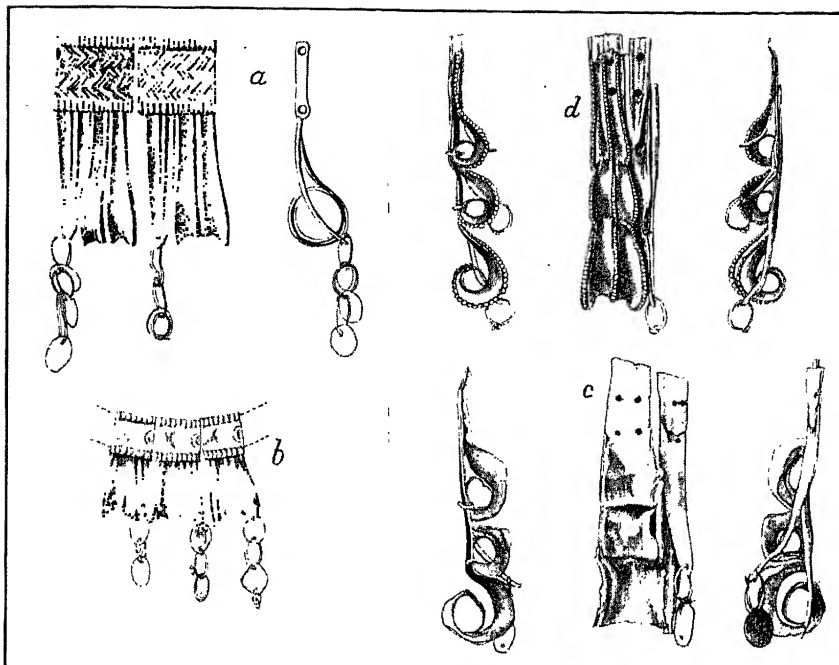




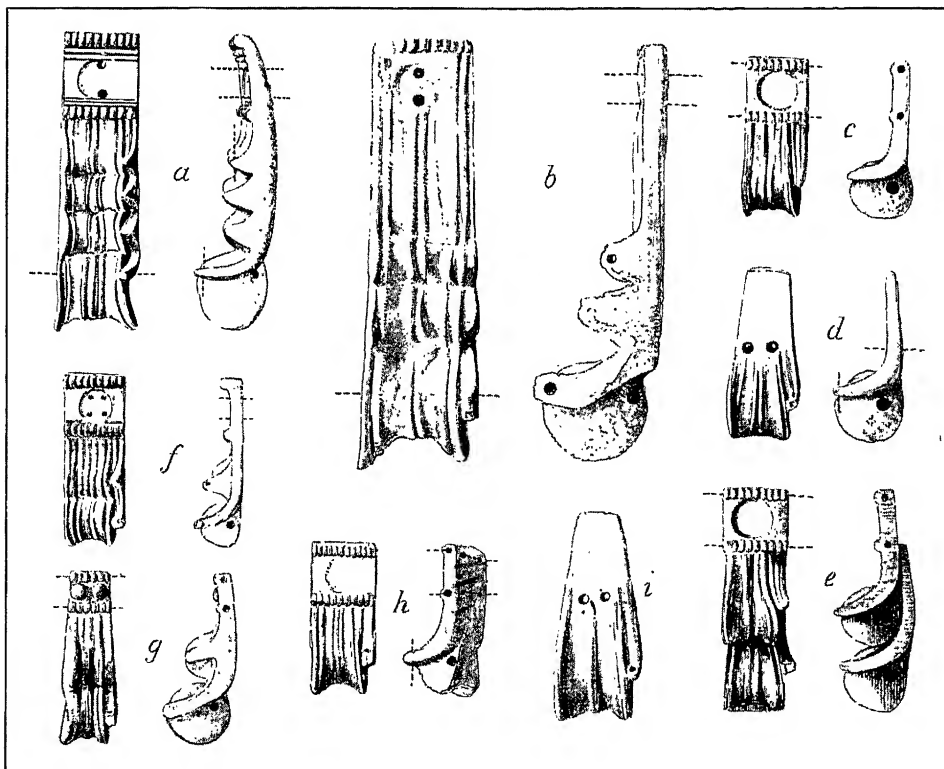


TOMB OF GENII: PLAN AND SECTIONS.





I



2

CURLED LEAF ORNAMENT: 1, GOLD, 2, GLASS PASTE. (Scale 2:3.)  
MYCENAE: 1, a-c; 2, a, c-i. ARGOS: 1, d. SPATA: 2, b.





I

a

b

c



2

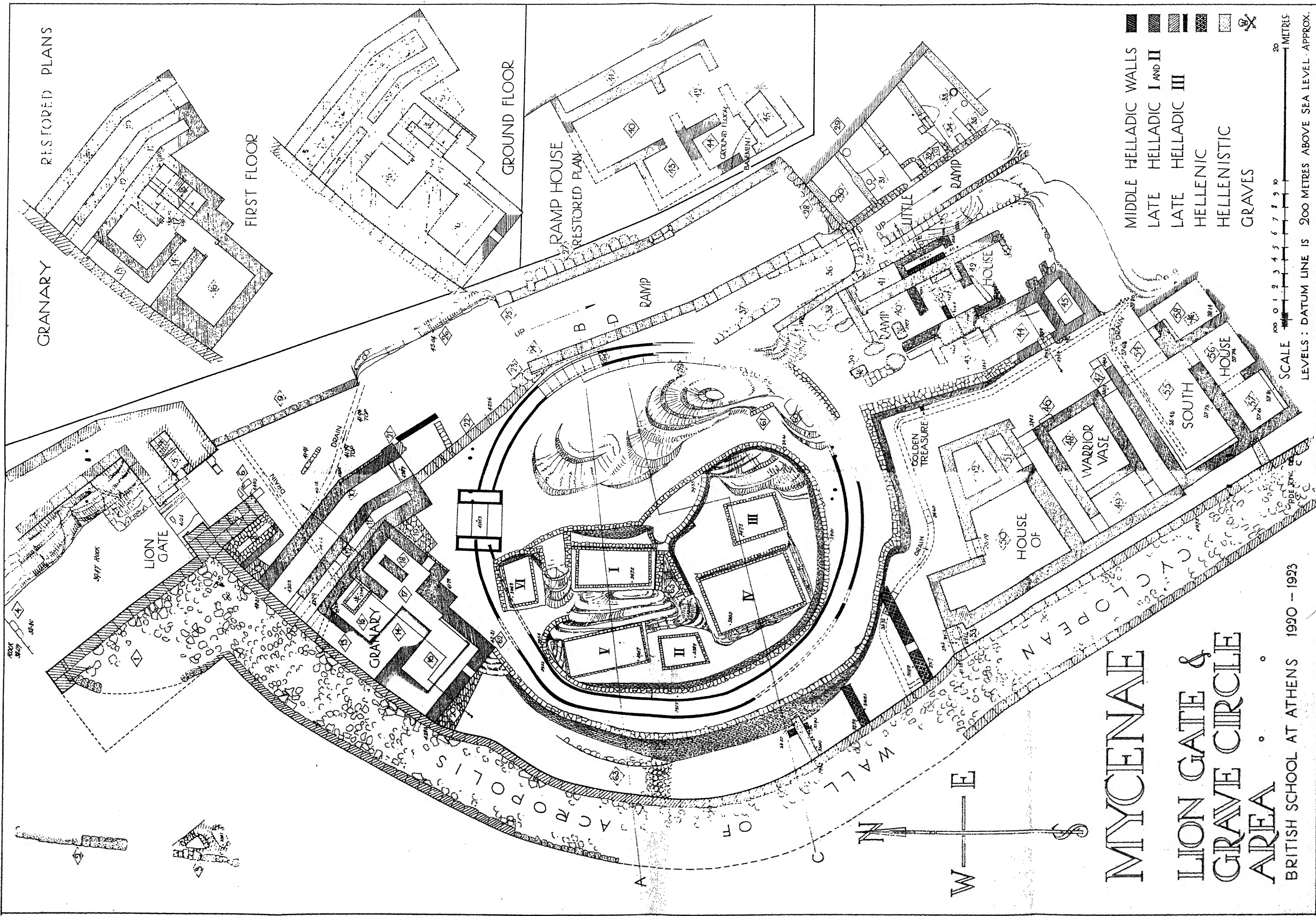
CYCLOPEAN TERRACE BUILDING: PITHOS BURIAL.






1. L.H. III. VASES FOUND IN PITHOS. (Scale 1 : 4.)
2. PITHOS BURIAL AS FOUND WITH SMALL VESSEL IN MOUTH. (Scale *ca.* 1 : 18.)



MYCENAE  
LION GATE &  
GRAVE CIRCLE  
AREA

BRITISH SCHOOL AT ATHENS 1920 - 1923



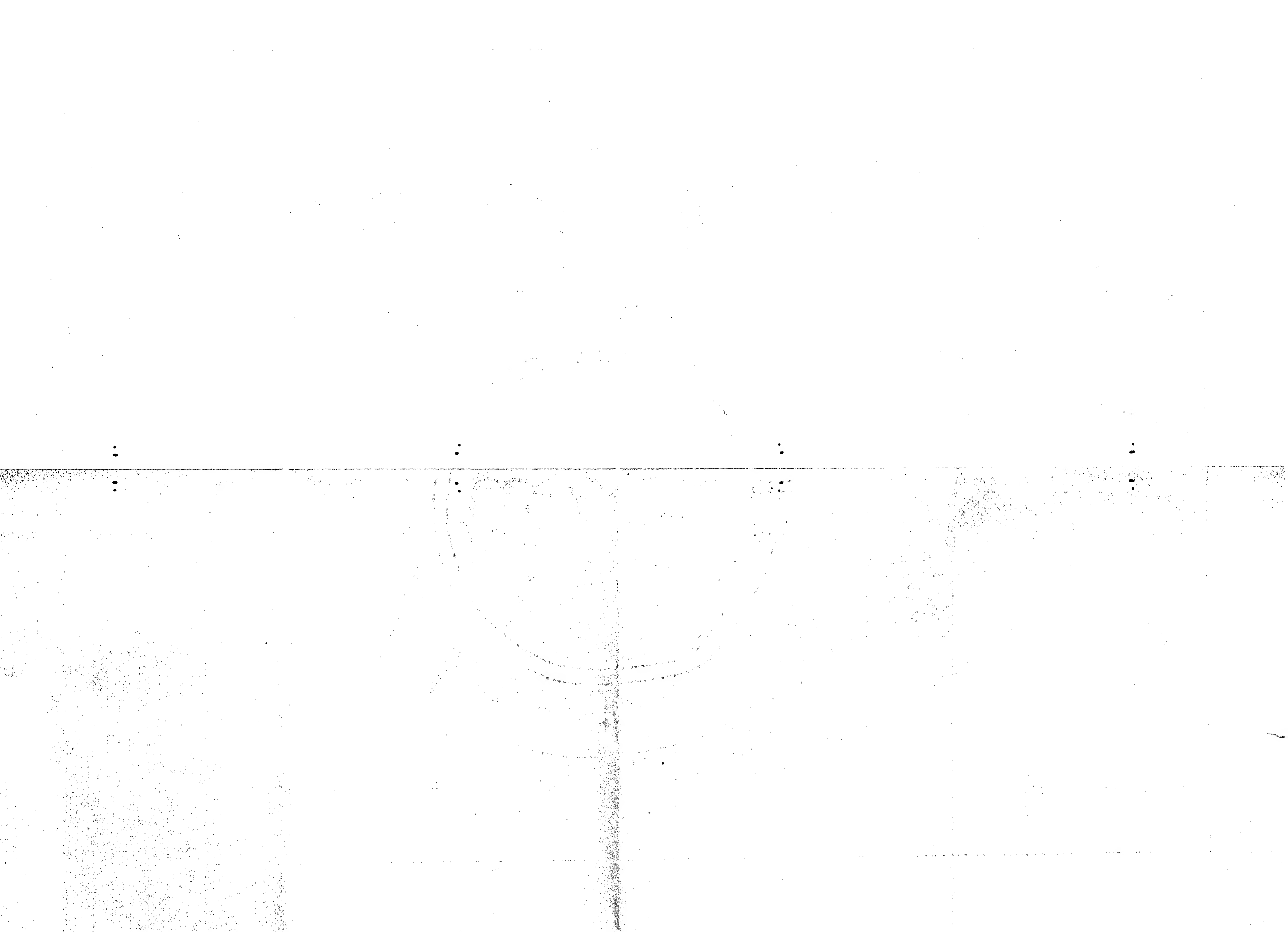
MIDDLE HELLADIC WALLS	
LATE HELLADIC I AND II	
LATE HELLADIC III	 
HELLENIC	
HELLENISTIC	
GRAVES	

SCALE

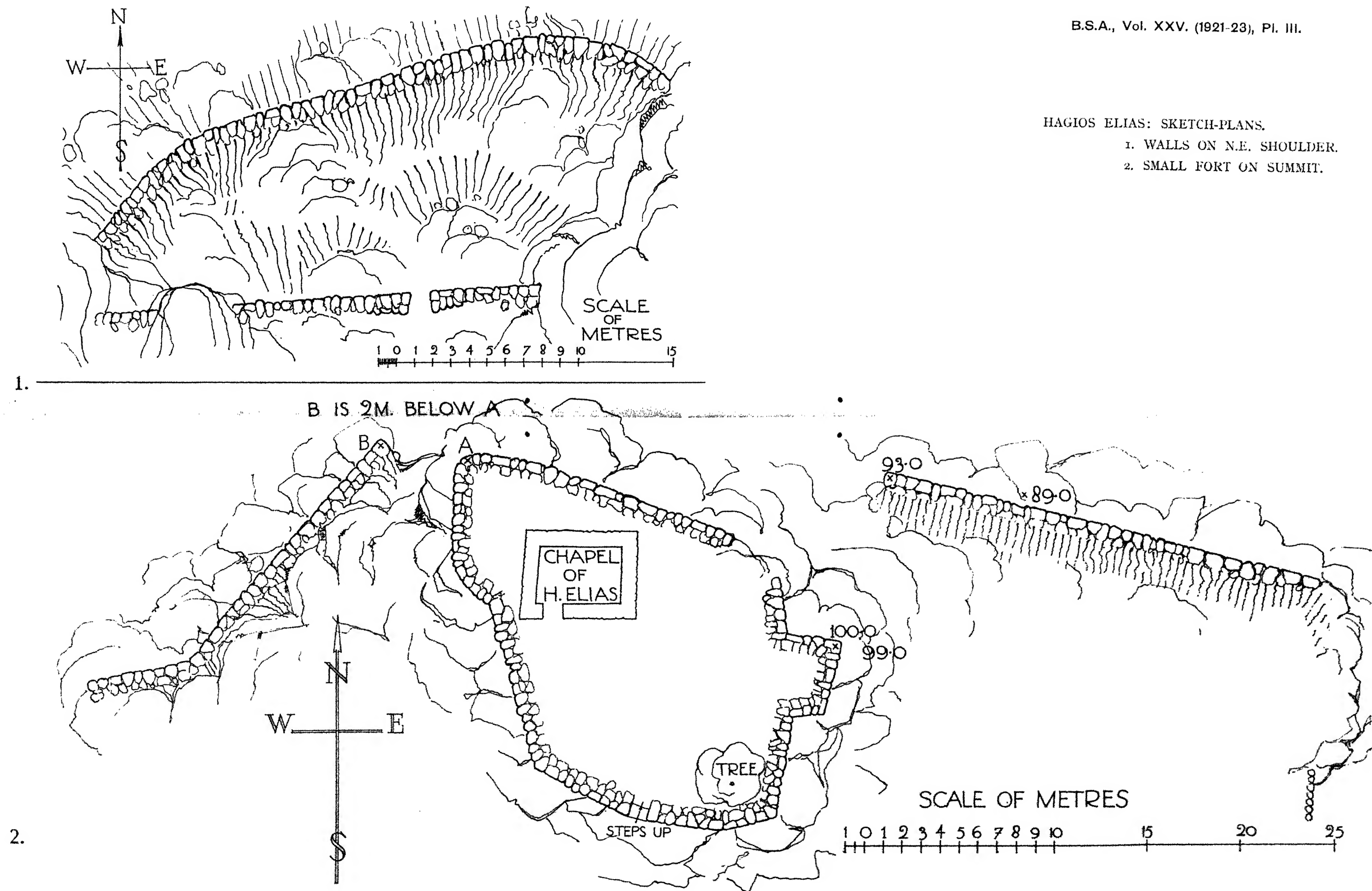
LEVELS : DATUM LINE IS 200 METRES ABOVE SEA LEVEL. APPROX.

20 METRES





HAGIOS ELIAS: SKETCH-PLANS.  
1. WALLS ON N.E. SHOULDER.  
2. SMALL FORT ON SUMMIT.





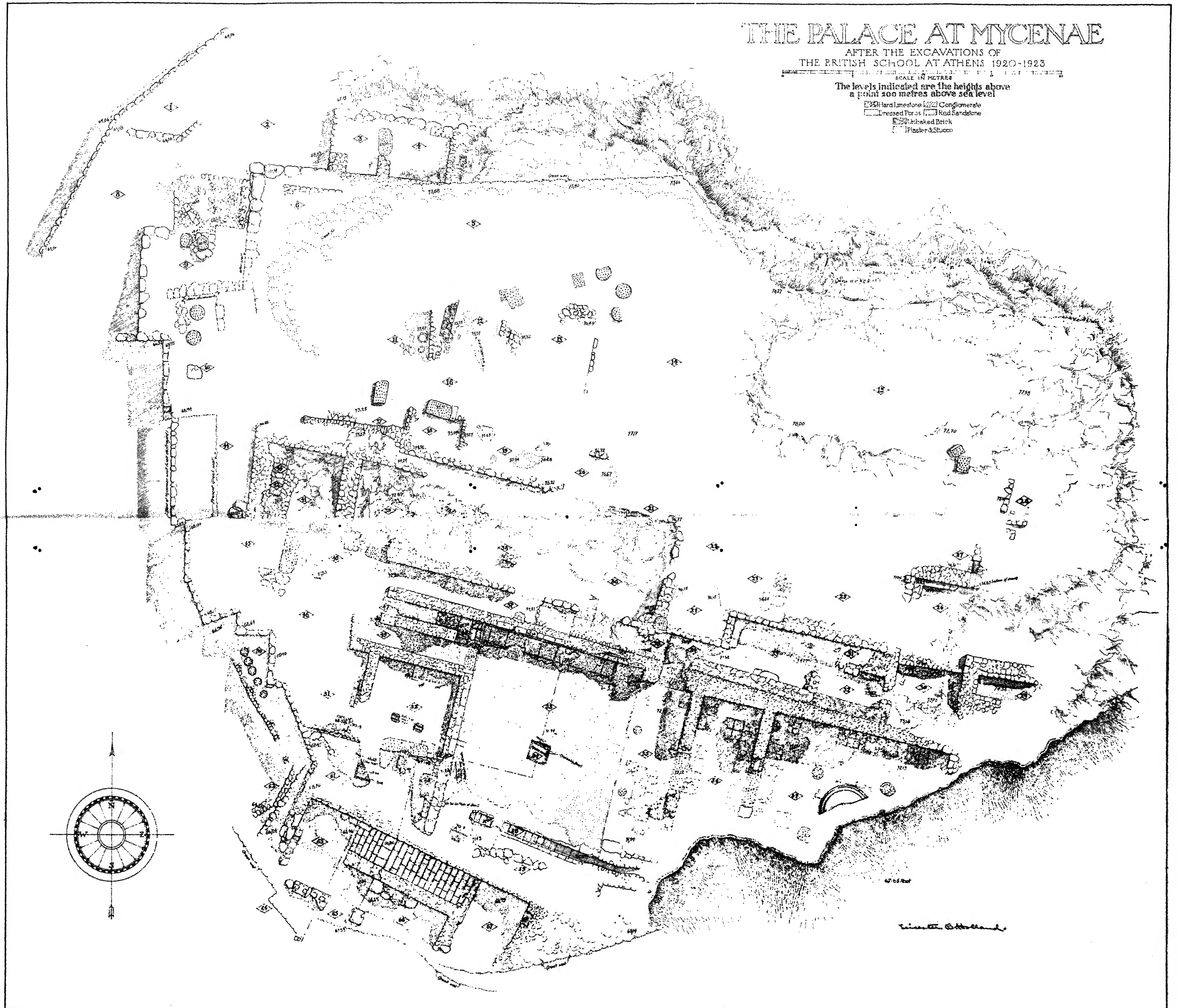
# THE PALACE AT MYCENAE

AFTER THE EXCAVATIONS OF  
THE BRITISH SCHOOL AT ATHENS 1920-1923

SCALE IN METRES

The levels indicated are the heights above  
a point 100 metres above sea level

[Pattern] Hard Limestone [Pattern] Conglomerate  
 [Pattern] Dressed Poros [Pattern] Red Sandstone  
 [Pattern] Unbaked Brick  
 [Pattern] Plaster & Stucco





1. The first part of the document is a list of names and addresses, which are arranged in a columnar format. The names are written in a cursive script, and the addresses are written in a more formal, printed style. The list is organized into two columns, with the names on the left and the addresses on the right. The names are written in a cursive script, and the addresses are written in a more formal, printed style. The list is organized into two columns, with the names on the left and the addresses on the right.

2. The second part of the document is a list of names and addresses, which are arranged in a columnar format. The names are written in a cursive script, and the addresses are written in a more formal, printed style. The list is organized into two columns, with the names on the left and the addresses on the right. The names are written in a cursive script, and the addresses are written in a more formal, printed style. The list is organized into two columns, with the names on the left and the addresses on the right.

3. The third part of the document is a list of names and addresses, which are arranged in a columnar format. The names are written in a cursive script, and the addresses are written in a more formal, printed style. The list is organized into two columns, with the names on the left and the addresses on the right. The names are written in a cursive script, and the addresses are written in a more formal, printed style. The list is organized into two columns, with the names on the left and the addresses on the right.

*"A book that is shut is but a block"*

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NEW DELHI.

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clean and moving.